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Architecture at the Paris Salon.

THE criticisms which have been made in some quarters, for a good while, as to the too theoretical and academic character of the annual exhibition of architectural drawings at the Salon, seem at last to be having some effect, for the representation of practical architecture—of buildings which are actually carried or to be carried out—is much larger in proportion than we remember it for many years back, and some of the new buildings illustrated are of considerable interest, as indicating a change of taste in a direction in which we, on this side of the Channel, think that a change was needed, *i.e.*, in the style and treatment of country houses, of which, as we shall see, there are some very pleasing examples.

The usual set of immense drawings of a restoration of an antique building, proceeding from the Villa Medici, is not however wanting. This year it is the restoration of the Acropolis of Anxur, by M. Chaussemiche, who has one room in the long range of galleries entirely to himself. We have of course an elaborate drawing of the actual state of the remains, from which not much is to be made out except a kind of retaining wall with a deeply set arcade, and another wall in front of it at a rather lower level. The arcade is fairly intact. The plan indicates some remaining walls which cannot be seen in the view, but nothing that is much above ground level. On these bases M. Chaussemiche proceeds to erect, as usual in these cases, an elaborate scheme of walls, towers, steps, and temples, the greater part of which is evolved from his inner consciousness, or at all events is but conjecture from existing fragments. A temple with an open colonnaded portico in front and a square *cella* in the rear, is backed by an immense battlemented fortress, placed obliquely to the axis of the temple, and with square towers at the angles. The wide steps extending over great part of the front of the temple still exist in a dilapidated state, and there are enough remains to give the lines of the various walls; beyond that it must be mostly imaginary; but this does not, of course, lessen—perhaps it rather increases—the value of the restoration as a study in ancient architecture, and as a testimony of the diligence and insight of the author. The restoration shows the arcade before referred to as forming the face of a great platform upon which the temple and fortress are erected, and from which the rocky ground slopes away in every direction. The drawings are distinguished by the large scale and conscientious finish in every detail which has long been a tradition with the French students at Rome.

Another large restoration scheme, or perhaps we should rather say an archæological study, is comprised in M. Nodet's fine set of drawings relating to the palace of the Popes at Avignon, which is characterised in the catalogue as comprising an abstract (*relevé*) of the existing state of the palace, with researches as to its primitive condition, and a plan of its transformation into a museum. The drawings, however, fine as they are, do not show any distinction between what is merely illustrative of existing work and what is restoration. What we see in the drawings are vast piles of irregular but very well preserved masonry, with lofty un-moulded wall-arches with plain soffits, including beneath them in most cases traceried windows of later date, or occasionally small separate openings which may be of the same date as their surroundings. Altogether, though an immense amount of work has been put into these drawings, they do not convey much information except to a spectator who may have recently visited Avignon and has the details of the Papal palace fresh in his memory.

Among the drawings showing modern buildings the most interesting at the moment are those for the new Armenian church at Paris, to be built from the designs of M. Guilbert, the architect of the Bazaar Fire Memorial Church in Rue Jean-Goujon, in the same street; it was in fact the memorial church which brought the architect the commission for this later building. The church shows a square plan with an apse, and a smaller square apartment as a vestibule. The central space is reduced (above) to a smaller one by four great intersecting arches springing from wall columns a little way from each angle of the main building. These arches have soffits the plane of which twists from a horizontal line at the springing to an angle of 45 deg. at the crown, the arches cutting each other at the point where the twist of the soffit of one arch is at the same angle as the main curve of the crossing arch. The system is ingenious, but one may doubt whether it will look very well in execution. The space left inside the crossing of the arches is covered by the central dome. The inlaid floor, however, does not follow the plan of the dome, but is treated in a horseshoe design with its open end towards the sanctuary. The style is Byzantine—modern French Byzantine, that is to say, with marble columns employed internally, and a great deal of carved ornament of Byzantine type, with gold and mosaic freely used. The worst point about the interior decoration is the colossal head in mosaic in the apse, representing we suppose the head of Christ, and which is 6 ft. or 7 ft. wide, while beneath it is a frieze of figures of saints or apostles of about natural size. The combination is shown again in a coloured model of the apse; and however this colossal head may appeal to the religious feelings of Armenian worshippers, in a decorative sense its effect is most unhappy. The church as a whole does not seem at all equal to the architect's Bazaar church; the fact being perhaps that he is more in sympathy with Classic than with Byzantine work, and understands better how to treat it.

Among other examples of church architecture the majority show that kind of French treatment of Byzantine or Romanesque suggestions which is at present the favourite style for church architecture in France. There is M. Rey's Church of St. Paul, Paris, in this case Romanesque rather than Byzantine in tendency, with a tower with a strongly

marked cantilever cornice and a spire over it; various decorative details, of a feeling between Classic and Gothic, are carefully and neatly executed in line drawing. There is M. Closson's church at Flers—Neo-Romanesque, and very ugly in every way, both in detail and in general lines; so it appears at least to English eyes. Why this form of modern French architecture should seem so especially uninviting and unattractive it is difficult to say; it is perhaps that there is a certain clumsiness and heaviness about the detail which does not harmonise with the modern precision and finish of execution; it is Byzantine or Romanesque proportion entirely shorn of Byzantine or Romanesque feeling. This, however, has become so much the accepted type of modern church design in France that one rarely sees anything else in the church designs which find their way to the Salon. There are however two interesting exceptions this year. One is M. Lesquendieu's church at Roye-sur-Matz, a small very solidly built and very simple three-aisled church, in Early Gothic style, partly round openings and partly pointed, with a west tower with a saddle-back roof. This is the work of an architect who has studied Mediæval Gothic in a sympathetic spirit, and it is far more suited for a country church than the pretentious modernised Romanesque erections that are so frequently put up on country village sites. The elevations are beautifully coloured to show the effect of the stonework, while the care with which the work has been studied is shown by the manner in which the varied widths of the stone courses are figured, from top to bottom, in decimals of a mètre. Another exceptional church design is the remarkable one shown by M. J. E. Allard, in perspective view, plan, and elevation, of the Church of Asfeld, in the Department of Aisne. This is a design so curiously original that it is difficult to suppose that it can be really intended to carry it out, though in an architectural sense it is a very fine conception. We first come to an open colonnaded porch of elliptical plan—the longer axis of the ellipse at right angles with the main axis of the church; this gives access to a small porch, circular inside and square outside, which leads to a vestibule that spreads out fanwise, and joins on to a large circular nave divided into compartments on the lines of a hexagon, each compartment forming a tribune with convex lines, in its lower portion, while the attic above recedes in a concave curve. The architectural effect of this is of course very striking and effective, as far as general composition is concerned; it would be more so if the details were bolder; the style is a rather hard timid Classic, somewhat flat in treatment; but there is certainly no timidity about the general plan. The roofs are shown as domical and covered with lead. Altogether it is a most unusual and original conception in church architecture.

Among designs for public works is M Lapeyrère's set of illustrations for a great new street for Bordeaux, cutting in a straight line through the existing streets to form a connexion between two important points in the town. The remarkable point about this is the way in which it is illustrated. Besides the plan of the town showing the line of the street, there is a whole series of finely executed perspective views showing the manner in which various existing buildings would group with the proposed street; it is not often that one sees a street plan illustrated in so effective a manner. M. Léon Lautier exhibits a design for a new theatre at Coulommiers, a rectangular oblong block in Classic style, in which the auditorium portion is well distinguished from the stage portion, and in the latter the two high narrow doorways for the admission of scene-paintings, running from ground level to cornice, are made a feature in the design. M. Fortier exhibits the drawings of the Hôtel de Ville of Solesmes, in course of execution; it is in a rather coarse "Free Classic" style, with mullioned windows, immense metal crestings on the ridge (an unfortunate weakness of French architects in this class of building), and a very ugly centre turret on the roof with a series of projecting eaves one over the other which has an unhappy effect. M. Esnault-Pelterie's "Hôtel Particulier," a Paris street house, is a good example of its kind, and is an executed building in a design mainly of Louis Quinze character; the stone details are simple, and the treatment of the iron-framed windows in lines curved on plan, projecting rather in the centre, gives an agreeable modelling to the front; the balcony ironwork also is in a fine flowing style. The bad point about the design is the curious trick of a kind of ragged ornament to the stone socles under the side panels of the elevation, as if icicles were dripping from them; one of those odd lapses into bad taste which are sometimes seen in otherwise very good French street designs. M. Noel's "Immeuble de la Société de Saint Gobain" is another example of the modern Paris street building, in a more solid Classic style and with less filigree ornament than usual. M. Gustave Rives exhibits a large frame of photographs from executed works, including the Pavilion of the Touring Club, too ornate, but clever in treatment; and a "Maison de Rapport" or business house in the Avenue de la Grande Armée, or rather just out of it (for we saw the building). This is a dignified specimen of a street building, sumptuous in the proportions of the stonework and not overdone with ornament; but in the semi-circular end, at the angle of two streets, there is rather a bad effect produced by the rusticated arch which is circular on plan, circular in elevation, and in which the voussoirs overhang in a concave quadrant section, so that the lines of the rustication are formed by the intersection of three curves on different planes. This forms, no doubt, an interesting study in stereotomy, but the result is by no means worth the ingenuity expended in producing it.

An interesting exhibit is M. Raimbert's "Etude de la Décoration d'un Pont sur la Seine à Passy," a design which was put forward by the Société Française de Constructions Mécaniques, but apparently not adopted. It is a bridge in two stories, so to speak; the lower bridge and the piers are excellent in design, on very simple lines; the bridge is a steel arch based on turning points at the apex of slightly pyramidal stone piers; in the upper bridge, which is carried on standards from the lower one, the design of the balustrade and decorative escutcheons is also very good; the weak point is in the decorative finish of the upper portion of the standards, which is ragged and uncertain in outline. The exhibition contains a good many of the usual academical studies for "Une Ecole Militaire," and other establishments of the kind, which all have a certain academical dignity and completeness, but which are so much alike, year after year, in their grouping of rustication and pilasters, that it is difficult to distinguish one from another, or to say anything about one of them which would not equally apply to all. The study which goes to produce this kind of design is good training in the sense of proportion and balance of design, and it must be added that the plans are generally meritorious; but it is essentially architecture of the atelier, lacking in life and interest.

But the house architecture this year is really very interesting. M. Marchand's "Maison de M. I . . . . à E . . . ." (there is a characteristic reticence about the title—in France it is bad form to drag in the name of your client in a catalogue) is not architecturally one of the best specimens, as far as the exterior is concerned; it is a type of modern château, but less pretentious than usual, though it is not without the usual rampant barge-boards, &c. But the first floor plan is a good example of the chamber planning of an upper-class French house. There are four large bedrooms, for Monsieur, Madame, two daughters (occupying one room) and a guest. Each bedroom has opening out of it a large "cabinet de toilette," or washing-room, the young ladies' room having two, with the entrance forming a lobby between them. Madame's "toilette" also has communication with Monsieur's bedroom, and forms the neutral ground or vestibule between them, for of course Monsieur and Madame do not occupy the same bedroom, which in France would be considered a very *bourgeois* arrangement. But the systematic provision of the separate room for ablutions in connexion with each bedroom is a point for note, and for imitation. There is a separate bathroom as well, for more serious operations. The "Hôtel de Mme. B——; Paris," by M. Bocage, is an important example of a Paris house, standing on a triangle at the junction of two streets; the plan is very clever; the outbuildings are kept on the street level at the extremity of the triangle, and a sloping staircase wing leads from the courtyard to the level of the principal floor, the main part of which is planned almost like a transept church, only that the transepts are apses. The exterior treatment is in the usual style of the Paris street mansion built in stone: the timber loggia in the upper story looks rather out of keeping, and would have been better of stone also.

In the designing of country houses there seems to be quite an awakening movement among French architects, so far as the Salon exhibits can be taken as an indication. The horrible kind of creation generally known as a "Maison de Campagne"—a building all spikes and ornamental barge-boards, is hardly to be seen this year; and in its place we are equally surprised and pleased to find specimens of country houses of simple and really picturesque character. M. Le Tourneau's "Maison de Campagne de M. G——," for instance, is a kind of thing one has hardly met with at the Salon before. In plan it is a rather long parallelogram with two cross blocks or transepts, one of which forms the entrance hall. In outer appearance it is a long plastered or rough-cast building—probably rough-cast (it is not easy to tell exactly from the drawing), with red brick dressings to the doors and windows,

the larger windows having also flat-arch red brick transoms with square blocks of stone at the junctions; the windows simply treated in small panes, and a long red-tiled roof over all. There are no carved gimcracks of any kind; the whole thing is a quiet picturesque country house, of a type hitherto almost unknown in modern French domestic architecture. Somewhat akin to this is M. Prudent's "Projet de Vignoble dans le Côte d'Or;" a principal building in two stories of somewhat similar style to that last described, with long red-tiled roofs and an upper story with a large open-timber roof—this is the "cuverse," the building for fermenting vats; behind it is what seems to be the residence of the manager, and in front of it nine small dwellings for the "vignerons' are symmetrically arranged *en échelon*, a centre one and four on each side. Then in another room we have a frame of "Maisons de Campagne au bord de l'Eau," by M. Bassompierre-Sewrin, an architect who comes of a good school, being a pupil of M. Ginain and of M. Scellier de Gisors. These are plain stone buildings in random or coursed walling, with a certain amount of simple timber structure erected on the stone base; one of them shows a loggia of two elliptical headed arches in plain masonry, with timber projecting balconies elliptical on plan, all treated in a perfectly simple manner, and more like an American seaside house than a French one. It is perhaps the influence of American taste which has produced this, as we know how American and French students are mingled in the French ateliers; the notable point is that we never remember to have seen before at the Salon any such designs as these, so unpretentious and so suitable to the situation. A similar tendency is discernible in the "Maison de Colon" in Algeria by M. Balleyguier (another pupil of M. Ginain); a white plastered or cemented building with white stone angle quoins and red brick dressings alternating with white stone to the windows, with red brick piers to the balustrade above the cornice; all of which has a very good and characteristic effect. In a different manner, but also an unusual one for a French country house, is M. Bernier's "Projet du Château des Chatelliers," which shows a plain low stone structure in a severe classic style, with slightly projecting wings and a columned porch; a country-house such as one might expect to find in an English park laid out in the eighteenth century, and quite different in character from the usual French château of the same period. All this shows that foreign examples are beginning to have their effect on French domestic architecture.

The "megalo-mania" of the budding French architect is illustrated in such a thing as M. Honegger's "Projet pour un Monument Commémoratif de la Fondation de la Confédération Suisse." M. Honegger indeed is Swiss by birth, but he practises in Paris. His design is of a type of which an example generally occurs in each Salon, and which reminds one of the ancient sculptor's offer to hew Mount Athos into a statue. A colossal seated figure, which outscales the largest sculptures of Egypt, is hewn out of the rock on an upper part of a hill; then there are the usual vast flights of steps and inclined planes, &c., and two equally colossal lions (the human figures are about the height of their paws) keep guard halfway up on either hand. This kind of thing might be done, of course—it is only a question of money; but practically it is a merely visionary proposal, and perhaps one is hardly uncharitable in regarding it in the light of an architectural advertisement. A recent competition for a monumental fountain at Reims has led to the exhibition of various designs for this purpose. Of these that of M. Eichmuller (in collaboration with M. Giraldon) is a pleasing design, consisting of a basin, quatrefoil on plan, with a circular stele in the centre with figures grouped round it; the whole is graceful in effect and composes well. M. Villeminot's design for the same fountain competition has also a lofty centre stele, decorated with symbols and "attributes"; this spreads into an upper basin of quatrefoil plan, carried underneath by large boldly designed consoles, the composition expanding at the base into four radiating pedestals with recumbent figures. This is a design in which a sculpturesque freedom of line is combined with well-defined and symmetrical architectural form, contrasting with one or two others which are all twists and contortions. With these fountain designs we may group the design by M. P. H. Mayeux for a monument to Jeanne Darc, intended for a site in front of Nôtre Dame; but whether this proposal is a serious one or only an ambition of the sculptor we know not. It is a curious affair; the heroine is on horseback on the top of a lofty pedestal perpendicular in front and sweeping out in a somewhat tent-like form in the rear, the lower portion of it being actually carved into the semblance of folds or curtains. In the front is the inscription "Elle Ecrasa le Dragon," and in the rear is the dragon, which of course represents the English invaders. It is a curious-looking affair, and we cannot say we should like to meet it on the Place Nôtre-Dame. Much more satisfactory to contemplate is a decorative design for a fountain by M. Castex (architect) and M. Carlier (sculptor). This is illustrated in a plaster model showing a triangular fountain with a triangular open pavilion with columns and arches, decorated with sculpture in the spandrels, and with a single figure with a water-jar on her shoulder under it, the mouth of the jar evidently forming the fountain. There are two tiers of circular basins, very well profiled, and connected by gracefully-lined scrolls opposite to the three angles of the pavilion; altogether a very artistic and finished piece of work. The same architect exhibits a model of "Un Monument Commémoratif" which looks somewhat like a Jaina pagoda with the Gallic cock on the top; the base of this is also on triangular lines, with a bronze figure of a soldier at each extremity. It is not equal in merit to the fountain.

The collection includes of course, a considerable number of illustrative drawings and sketches. The latter, as a rule, are not equal to the work of our best English sketchers, but there are some very fine highly-finished drawings of existing buildings, among which may be specially mentioned M. Munier's splendid set of coloured drawings of the Mosque of Kismas-el-Sohaki, Cairo; a set of illustrative drawings of architecture such as we never see in England. Two water-colour drawings of the gloomy old prison of St. Pélagie, about to be demolished, have a historic interest; and M. Santerre contributes a large frame of sketches under the title "Italie."

THE SCULPTURES OF THE PARTHENON.

DR. MURRAY has given us a delightful book,* and one for which many have long eagerly looked. The year 1903 sees the completion of the century during which England has owned the "Elgin Marbles." Since 1816 the British Museum has been their guardian. Europe had surely a right to ask that, sooner or later, the keeper of the classical antiquities of that museum should fully publish and authoritatively discuss the treasure committed to his charge. The lapse of a whole century is evidence that there has been no unseemly haste, and that lapse has been, on the whole, clear gain to science. Time has been allowed for three generations of savants from all parts of Europe to examine and discuss the sculptures in detail, to start and often abandon theories of their interpretation; time for sculptors to attempt restorations of missing figures, and, more important still, for the detection and identification of fragments brought to light by the Acropolis excavations, or scattered about in the various museums of Europe.

The question of adequate publication comes, of course, first. And here everyone will turn at once to the splendid reproduction of the frieze which Dr. Murray has given in one long folding sheet. To use his own words, "the mere magnitude of the frieze as an artistic conception is thus apparent at a glance, and its extraordinary beauty in detail is readily recognisable in the process of photogravure which has been employed." The mutilated condition of many of the metopes and of both pediments prevents in their case a similar complete conspectus, but here everything that could possibly be done has been done. Carrey's drawings are reproduced, and the architectural framework he left unfinished is completed; individual figures still extant are reproduced in phototype. For the first time the student of the marbles has before him in one book the complete material for his work.

When we turn from publication to interpretation, archæologists will be conscious of a certain shock. For this the preface has prepared them. Dr. Murray there states that the starting-point of his book was a series of lectures on the sculptures of the Parthenon addressed several years ago to the students of the Royal Academy. To the Royal Academy the book is dedicated. The experience of these lectures led Dr. Murray to enter upon a much closer examination of the sculptures "on artistic more than on archæological lines."

It is no doubt disappointing that we are not to have a complete *Corpus* of sources, authorities, bibliography, &c., on the Parthenon and its marbles, but we are bound to remember that much of the purely archæological material has already been compiled by Dr. Murray in the Official Guide to the marbles, much also in his "History of Greek Sculpture" (vol. II.). We may take the present book as an artistic supplement to these two previous works—anyhow we are bound to judge it from the point of view in which it is presented to us by the author.

Moreover, in one respect there is no doubt

* "The Sculptures of the Parthenon." By A. S. Murray, LL.D., F.S.A., Keeper of Greek and Roman Antiquities, British Museum. London: Murray. 1903.

that, by adopting the artistic standpoint, by advisedly setting aside a whole mass of archæological accumulations, Dr. Murray is able to come to his subject with a singular freshness, frankness, and directness of personal appeal. He has said to himself: "the students to whom I must speak are to be artists, they want to know what *as artists* they have to learn from the Parthenon marbles." To be compelled to envisage ancient monuments from this particular angle is, to the professed archæologist, a very valuable compulsion.

A salient instance of Dr. Murray's method is his treatment of the vexed question of the interpretation of the two pediments—a treatment, we may say at the outset (though with some details we are at issue), unusually sane and large. "The name most appropriate to each figure," Dr. Murray rightly says, "may be argued interminably." But all these discussions revolve round the simple question, "Are the figures in the angles of both pediments deities of Olympus, or beings associated with the legendary history of Attica?" This simple question is of vital *artistic* importance, because "on that question turns the grandeur of the artistic conception as a whole." Therefore, this is a fundamental point "we must decide one way or the other. After that the names of the several figures are of less consequence. Therefore, we have dwelt briefly with matters of nomenclature all through." It is this large grasp of the essential, the *artistically* essential, the bones and sinews, the unity of a conception that distinguishes Dr. Murray's criticism throughout. Almost excessively cautious as to detail, he is emphatically dogmatic where a vital truth is at stake.

Dr. Murray, as between the two contending schools of interpretation, decides unhesitatingly for the second, that which sees in the angle figures of both pediments not Olympians, but local divinities, beings associated with the legendary history of Athens. This canon of interpretation is now, for the *west* pediment, adopted, so far as we know, by all sound critics. The shift of interest from the cosmic and Olympian to the *local* is, indeed, characteristic of the whole trend of modern mythological inquiry. It is when we come to the *east* pediment that the real issue begins. It is a commonplace among lecturers and critics to say that as the western pediment is local in itself, the angles bounded by local river-gods, so the east pediment is Pan-Hellenic, even cosmic, the angles bounded by sun and moon. At this point Dr. Murray makes an observation as characteristically acute and original as it is beautiful. "The sculptor has set as boundaries of the scene the sun rising from the sea in the left angle and the moon descending behind the hills in the right. The sun and the moon are doubtless cosmic powers common to mankind. Yet any little town or village knows them only as they appear to it. An Athenian standing at dawn before the east front of the Parthenon and looking towards the pediment might see the sun rising from the sea on his left, and the moon passing on his right away over the hills. He would know no other sun and moon but his own. . . . We think that the sculptor has distinctly meant to indicate sunrise at Athens. But what has sunrise to do with Olympus? And what interest could the Athenians be expected to take in any sun or moon but their own?"

Starting with this *local* sunrise, Dr. Murray decides that all the figures of both the east pediment as of the west are local personages. The so-called Theseus he names Kephalos, the so-called Demeter, Persephone, and Iris, the three local Horæ, Thallo, Auxo, and Carpo. The so-called Fates are the three daughters of Cecrops, Aglauros, Herse, and Pandrosos. With the utmost diffidence, we venture at this point to differ, and to offer for Dr. Murray's consideration a slightly, a very slightly, modified canon of interpretation. The west pediment is bounded by river gods of *purely local* significance, the figures contained are also purely local. The east pediment is bounded by sun or moon, also in one sense local, but susceptible also of Pan-Hellenic, even cosmic expansion. The birth of Athene, unlike the struggle between Athere and Poseidon, took place, according to universal tradition, not on the Acropolis but in Olympus. The genesis of the myth of that birth is due to the desire to give to the local Korè, the local *maiden of Athens* (ἡ Ἀθηναία), Olympian status, to rid her of local circumstance, and make her a Pan-Hellenic potency. All the intervening figures have, to our mind, a like significance and weight. They are local figures, but they are local figures transfigured to an Olympian significance. The figure Dr. Murray, following Dr. Furtwängler, calls Kephalos is, we believe, not the merely local Kephalos, but the mountain god Pan. Pan was on the Acropolis a local god, but one who emerged to Pan-Hellenic significance. The Horæ we accept; they are local, but also Olympian. The Three Fates are conceived in like manner. There are local Moiræ, but they are also the great cosmic potencies, the Moira of the sea, Thalassa, the Moira of the land, Gaia, and the eldest of the Fates, the heavenly Moira, Ourania. The keynote of the east pediment is, to our mind, not the purely local, but *the transmutation of the local into the Pan-Hellenic* —the keynote, surely, of the whole policy of Pericles.

None the less we thank Dr. Murray for his much-needed emphasis on what is purely local. We trust no student—and still more no archæologist — will leave his book unread.

NOTES.

Liverpool Cathedral Competition.

WE print on another page the Report of the Assessors in this competition. Our readers will have already learned from the daily papers that the Committee have, so far at all events, expressed their intention of not accepting any of the designs; though we are not sure whether this resolution is entirely final. What is clear is that they will not accept the one which the assessors have placed first, and for good reasons. The Committee made it a condition that the plan of the cathedral should provide for a wide open space for a large congregation within hearing of the preacher. Four of the competitors have obviously had this in mind, and one or two of them have provided for it very completely. The fifth competitor has entirely ignored it, and his design has been selected by the assessors; a result which further illustrates the fact that very eminent architects may nevertheless be very ill qualified to sit in judgment on a competition. What the Committee probably feel is that, as the assessors have chosen a design which ignores an important condition in their requirements, and as they do not wish to select another design in opposition to the assessors, they have no choice but to refuse them all. As the designs were only open to the Press on Thursday this week, we cannot review them in detail in the present issue; but we may say that we do not agree with the selection of design No. 1 by the assessors, even on grounds of architectural treatment, independent of the question of plan. One at least of the other designs is decidedly superior to it; but we will go further into their merits in our next issue.

Thames River Works.

AMONG the proposals contained in the Government measure now before the House of Commons, we note that provision is made for the establishment of a Port of London Commission, to which will be transferred the undertakings of the London and India, Surrey Commercial, and Millwall Dock Companies, and, with some limitations, the powers and duties of the Thames Conservancy and of the Watermen's Company. No transfer is proposed from Trinity House, and the powers and duties of the City Corporation as Port Sanitary Authority will also remain untouched. The river works to be undertaken by the new Commission include the dredging of a channel, at least 30 ft. deep at low water of spring tides, from the Nore to the Albert Dock, and of the greatest practicable depth as far as the old Thames Tunnel. The width of the channel is to be 1,000 ft. as far as Crayfordness, a length of about 29 miles, 600 ft. thence to the Albert Docks, 7¼ miles further, and 300 ft. from the Albert Docks to the Thames Tunnel. These operations will probably occupy some eight or ten years, and to provide accommodation for vessels delayed by fog, or otherwise, basins are to be dredged at various points as soon as possible. It is also recommended that a training wall should be commenced without delay at Leigh Middle Shoals. There is no doubt that the trade of the Port has been severely handicapped by the inadequacy of the channels, especially in view of the ever-increasing tonnage of vessels, and it is therefore satisfactory to find that the new Bill contains such provisions as those which we have mentioned. If properly carried out, as we have no doubt they will be, the channels ought to become permanent, and it is morally certain that they will be kept open by the tidal currents of the river with comparatively little dredging. Considerable improvement is required at the various docks, but the new Bill gives no powers to the Commission beyond those already possessed by the Dock Companies at the present time. It will, of course, be within the power of the new Commission to consider what improvements and extensions are desirable at the docks, and to apply to Parliament for authority to execute such works as may be found necessary. In thus leaving the matter to the Port Commission the Government have acted wisely. The river works stand on a different footing, and, as the great water highway of London, it is important that the Thames should be placed in an efficient condition with the least possible delay after the passing of the Bill.

Panama Canal Plans.

IN a paper now under discussion by the American Society of Civil Engineers, Mr. Morison discusses the relative merits of a tide-level and a high-level canal for the Isthmus. Hitherto the control of the Chagres River has been the great difficulty in the way of a sea-level canal. The International Commission, under the leadership of De Lesseps, certainly decided in favour of such a work, but the practical details were never thought out, and the engineers who were sent out to control operations and to solve the problem finally gave up the idea in despair, and voted for a lock canal. This ignominious failure appears to have acted like a ban upon the project of a sea-level canal ever since. It is therefore refreshing to find an intelligible and feasible proposition for a tide-level canal on new lines. As outlined in the paper, the scheme is perhaps a little incomplete, but the main idea is worthy of every consideration. The day will certainly arrive when a sea-level canal will become an imperative necessity, but in the meantime it is questionable whether the delay necessary for its construction is justifiable. In the opinion of some engineers, a lock canal ought to be made first. Such a waterway would be adequate for several years, and when the time arrives its transformation could be accomplished without the stoppage of navigation. The question is chiefly one of policy and cost. A tide-level canal would take fully ten years longer to construct than a high-level canal, and would cost about double. These considerations will probably preclude the initial realisation of such a scheme.

Buildings in Advance of Building Line.

WE commented recently on the case of Blackpool Corporation *v.* Johnson, which is an authority to the effect that an innocent purchaser of a house which has been brought forward in advance of the building line is not the person who commits an offence against Section 3 of the Public Health (Buildings in Streets) Act, 1888, nor liable to the penalties enforceable under the section against the person who continues the offence. This section has again (May 8 and 9) been considered in the Courts in the case of Mullis *v.* Hubbard, and it has been decided that the section creates only one statutory offence, the erection and maintenance of a building beyond the building line, for which the sole remedy is provided by the statute, and that therefore the owner of a neighbouring house had no right of action in respect of an offence under this section. In the case as at present reported it is not stated what special damage the plaintiff alleged he had suffered. If it had been an interference with his light or air he no doubt would have had his remedy independently of this section.

Projections over Pavements.

A CURIOUS contention was raised in the case of Winsborrow *v.* London Joint Stock Bank, Ltd. The defendant bank had used certain reflector lights, which were fastened to the wall of the building by staples, and which were about 15 ft. above the pavement and projected some 4 ft. The Surveyor of the City of Westminster took out a complaint against the bank under Section 65 of the Metropolitan Paving Act, 1817, which prohibits any person from "hanging out or exposing, or permitting to be hung out or exposed, any meat or offal, or other matter or thing whatsoever from any house." The magistrate dismissed the complaint on the ground that the reflector lights were not things *ejusdem generis* with those specified in the section, and the High Court affirmed his decision, but apparently on the ground that the section referred in any case to things temporarily exposed, as distinguished from those permanently attached. We think the ingenuity of surveyors might rather be expended in securing that sun-blinds shall be placed at a greater elevation than at present is the case. With an umbrella it is impossible to walk under these obstructions over the pavement, and Section 119 of the Metropolis Management Act, 1855, contains powers enabling the authorities to obviate this nuisance.

Restrictive Covenants in Conveyances.

IN the case of Osborne *v.* Bradley, recently decided in the Chancery Division, a certain estate had been purchased by the plaintiff subject to covenants which were to run with the land, amongst which was one restricting the erection on the frontage of buildings other than private dwelling-houses of a certain value. The plaintiff had conveyed certain land on the frontage to a purchaser who had erected two dwelling-houses thereon, and these houses, after several conveyances to various purchasers, had been purchased by the defendant in this action. All the deeds conveying these houses had contained the restrictive covenant as to the nature of the buildings, but the character of the estate had changed, and a number of shops had been opened in close proximity to the houses in question. The defendant desired to convert the houses also into shops, but the plaintiff applied for an injunction to restrain him from so doing. It was held that the covenant was one taken by the plaintiff for his own benefit, and he was entitled to equitable relief as against the defendant and to an injunction. It may be presumed that the covenant was also capable of being enforced by the original vendor of the estate as against the plaintiff, and that if the plaintiff had granted leases not containing the same restriction, he would have been liable in an action to his vendor for not having secured the observance of the covenant, and thus it becomes somewhat difficult to see how land subject to such covenants is ever to be freed from the restriction, and purchasers should accept such covenants with caution. In this case the evidence was that at the time these premises changed hands no building scheme was in contemplation on the estate, and therefore, no doubt, this eventuality was not present to the minds of the parties.

Ancient Buildings.

MR. YOXALL'S question to the Prime Minister this week in regard to the care and custody of ancient and historic buildings in this country is satisfactory so far as it shows that some Members of Parliament are interested in the subject. Mr. Yoxall seems to desire that the historical buildings should be placed under the control of a Minister of State as in France under the Law of 1887. But it may be doubted whether the country would be better off. Neither a Minister of State nor the Treasury will do more than the majority of electors demand, and as the mass of the population are little interested in historic monuments, neither Minister nor Treasury would trouble about the subject. Popular opinion needs to be formed, and if this can be done in favour not only of the preservation of historic monuments, but of public edifices of high artistic merit, those who are in charge of the public interests—whether the central or local government—will throw some energy into their administration. The County Councils have now power to take charge of historic monuments and to spend public money on their preservation, and they will do this quite as well as the central administration in London if there is influential public opinion on the question.

Steamboats on the Thames.

THE decision of the Parliamentary Committee throwing out both the Bills promoted by the Steamboat Company and the County Council for establishing a service of passenger steamers on the Thames must be somewhat of a surprise to the promoters, and is certainly a cause of disappointment to the public. The congested state of our streets is worse than ever, and it is to be hoped that the Committee appointed to investigate the means of locomotion in the Metropolis will be able to consider and report on the question how this splendid water roadway, running through most congested districts, should be utilised to the best advantage. We would, however, draw attention to the statements of counsel made during the hearing of the County Council scheme. We are always being assured that municipal bodies do not undertake schemes which involve a burden on the rates, yet the Committee were assured that in matters undertaken with a view to public utility Parliament was not to regard the question of profit and loss, and an increase of $\frac{1}{6}$d. in the rates was to be considered as a trifling matter. Ratepayers are beginning to feel that they have had sufficient practical experience of the development of such theories, and when it is considered that the Council's scheme necessitated the carrying of 15,800,000 passengers at an average fare of $1\frac{1}{2}$d. to render it remunerative, few people will regret its rejection. It can, however, hardly be doubted that if the public bodies concerned would only co-operate to assist private enterprise in the development of some scheme, this magnificent highway could be turned to useful and profitable account, and that not only would the ratepayers of London escape a further and unnecessary burden, but that they would participate with the general public in the advantages which would accrue from the opening of this rapid, easy, and healthful means of transport.

The King's Sanatorium.

IT is officially announced that the Advisory Committee for the King's Sanatorium have acquired from Lord Egmont a site of 150 acres at Lord's Common, Easeborne, in the vicinity of Midhurst and Haslemere. The ground, lying on the Lower Greensand formation, includes a fir wood, which shelters on the north side an open plateau more than 450 ft. above sea level, and commands a fine view over the South Downs. At the rear, northwards, the

ground rises to an altitude of 620 ft., so that shelter is obtained from the north and east winds; on the west side of the hospital site extends an open common. A supply of pure water has been secured by impounding some springs about a mile distant on the rising land to the north. The Advisory Committee instructed Mr. H. Percy Adams, their appointed architect, to study the plans of similar sanatoria in Germany and Switzerland, and he is now engaged in preparing the plans for King Edward VII.'s Sanatorium.

Electric Traction Without Rails.

IN many places it would be both useful and convenient to employ electric traction without the necessity for rails, and, as a matter of fact, two distinct systems of the kind are already in operation on the Continent. The Schiemann system incorporates a combination of the electric tramway and the omnibus, the vehicles receiving current from overhead wires, but running upon any ordinary road. This system is now at work between Königstein-Hutten and Königsbrunn, a distance of about 9 kilomètres, and a speed of 12 kilomètres an hour is easily maintained. Three classes of vehicle are used: omnibuses for passengers; light vans for parcels service; and cars, generally made up into trains, for coal and heavy goods traffic. As any vehicle connected with the overhead wire can be steered to a distance of about three mètres to the right or left of the trolley line, no difficulty is experienced in passing other traffic; but when two trolley vehicles meet it is necessary for the trolley poles to be removed from one of them until the other has passed. This trouble could be avoided by having two sets of lines, but the expense would hardly be justifiable, except in populous districts. The Lombard-Gerin system is of different character, for the vehicles are not propelled, but are hauled along by an "auto-trolley" travelling on two overhead wires. Current from these wires is first fed to a combined transformer and motor on the vehicle, and thence to the overhead trolley. This system is employed on a line about 5 kilomètres in length, between Fontainebleau and Samois, for an omnibus service, in which the average speed attained is 15 kilomètres an hour. The comparatively inexpensive character of systems such as these renders them particularly suitable for country districts, while the absence of rails is advantageous for urban traffic, and especially in narrow streets.

Electric Clocks.

WE had an opportunity last week of inspecting some novel electric clocks which have been devised by Messrs. R. M. Lowne & Sons, of Catford. The mechanism used is of the very simplest nature, and the results that have been obtained are very satisfactory. A free pendulum, suspended in the ordinary way by a spring, is the timekeeper, and the motive-power is furnished by ordinary Leclanché cells or dry batteries. The clock-dial can be detached from the pendulum and may be placed at any distance from it, and any number of clocks may be run by one pendulum. The life of the batteries is from two to four years, and they can be replaced without stopping the clock. Their initial cost, also, is only a few pence. It seems to us very surprising that electrically driven clocks are not more generally used. It is not because the subject is seldom discussed, or because the public never see electrically driven clocks. As far back as 1846 Mr. Alex. Bain, of Glasgow, gave an exhibition of electrically driven synchronous clocks in Old Bond-street, and M. Breguet in 1856 installed seventy-two synchronous clocks in the streets of Lyons. The causes of failure in these cases were due to sparking when the circuit was broken, the troublesome type of battery used, and the poor insulating material used in the wires. With modern batteries and insulated wire there are practically no electrical difficulties in the way of obtaining an accurate time service, and Messrs. Lowne have availed themselves of this fact. The electric current in their system can be also used to operate bells or syrens in workshops or factories at the proper times, as well as to drive the clocks, and so will obviate in some cases the necessity of having a timekeeper. As there are only two wheels in the whole mechanism of Messrs. Lowne's clocks, there is practically nothing to get out of order.

Jerusalem Aqueducts.

AS usual in Oriental countries, the admirable works constructed in ancient times for the water-supply of Jerusalem were long ago allowed to fall into a lamentable state of disrepair. The aqueducts no longer served their original purpose, or only did so when they happened to be in repair, and quite recently a serious water famine was only averted by the timely assistance of the railway company. Since then, a water system upon modern lines has been established, and water is now brought to the city from the so-called "Pools of Solomon," situated at a distance of about seven miles. A portion of the old stone aqueduct has been utilised in parts where it could be repaired without unnecessary expense, but for the greater part of the distance 4-in. iron pipes have been laid. Two public fountains have been erected for the use of the inhabitants, one within the enclosure of the Great Mosque, and the other outside the walls. The supply is still far from adequate, but the risk of water famine is much reduced. In connexion with this subject it is interesting to recall the inscription at Siloam referring to the rock-cut tunnel leading from the Ophel ridge to the Pool of Siloam. The most recent translation thus describes the construction of this ancient engineering work:—"(Behold) the excavation! Now this is the story of the tunnel: While the miners were still lifting up the pick towards each other, and while there were three cubits (to be broken) the voice of one called to his neighbour, for there was an excess in the rock on the right. They rose up—they struck on the west of the tunnel—the miners each to meet the other pick to pick. And there flowed the waters from their outlet to the pool for 1,200 cubits, and (three-quarters) of a cubit was the height of the rocks over the heads of the miners." From this account it appears to be clear that the tunnel was excavated by two gangs working in opposite directions, a method requiring a considerable amount of skill and accuracy.

HOTEL, FELIXSTOWE.—The new Felix Hotel at Felixstowe has just been opened. The architect was Mr. T. W. Cotman, of Ipswich.

COMPETITION FOR BUILDINGS FOR THE UNIVERSITY OF THE CAPE OF GOOD HOPE.

THE designs submitted in this competition have been on view at the Imperial Institute this week. They were crowded into a small portion of one of the galleries, some of them being skied so high that it was impossible to see the details of the plans and elevations. With the exception of the three premiated designs, the authors' names were not given. The designs were numbered on the backs of the stretchers or mounts, and, as many of these were pinned to the walls, the numbers could not be ascertained. It is useless, therefore, attempting to review all the designs, as most of them cannot be referred to either by number or name.

The conditions of the competition appear to have allowed the competitors greater latitude as to style of draughtsmanship, size and colour of mounts, and other details than is now usually permitted. Perspectives are a conspicuous feature of the exhibition; some are in pencil, some are line drawings in ink, others in monochrome (brown, green, neutral tint, or Indian ink), and others in water-colour. The scale of the plans and elevations was fixed at 16 ft. to the inch, thus considerably reducing the labour of the competitors. The problem was an interesting one—the design of a large hall (with a few smaller rooms) on a rectangular site, open on all sides, but with part of the site reserved for future extensions—and it is surprising that only about sixty designs were submitted, and that few of these were really worthy of the occasion.

The author of the design placed first is Mr. W. Hawke, A.R.I.B.A., of Stoke Cottage, Norbury. His plan has the great merit of simplicity, and gives promise of some pleasing internal effects. The principal entrance is in the middle of the principal front, and opens into an entrance-hall 22 ft. square, from which corridors extend to the right and left. Immediately opposite the principal entrance is one of the doors of the University Hall, which is the chief feature of the plan; this is a room a little larger than a semicircle, the chord forming the central portion of the back of the building. The platform is placed against the chord, and the seats of the hall are arranged in semicircles, struck from a centre a little in advance of the platform. A corridor sweeps around the curved wall of the hall on the ground floor, and unites with the right and left corridors already mentioned. The radius of the hall on the ground floor is 41 ft. In the upper part of the hall a gallery is formed over the concentric corridor, increasing the radius to 52 ft. The council chamber, committee-rooms, and offices are conveniently planned on the ground floor. Two staircases lead to the gallery from entrances placed near the rear angles of the two ends of the building. Each staircase has a single flight of steps with a wall on each side; this is not an effective method of treatment. The cloakrooms are not in the best position.

The hall itself will be a fine room, and from nearly every seat there will be a clear view of the platform, but whether it will be acoustically satisfactory is another matter. Externally the hall is the principal feature, rising well above the surrounding rooms, and being covered with a low segmental dome carrying a cupola. From the point of view selected for the perspective the dome seems to be a complete circle on plan, and the effect is satisfactory, but, seen from the side of the building, it will appear as it really is—about two-thirds of a circle—and will certainly have an appearance of incompleteness which will detract very considerably from the effect.

The second place has been gained by Mr. J. Edwin Forbes, 21, Waterloo-street, Birmingham, who has adopted a more ordinary type of plan. The large hall is a rectangular room measuring 90 ft. by 53 ft., the longitudinal axis being parallel to the principal front of the building. Two entrances are provided in the principal front, one at each end, and each leads into a hall 30 ft. by 24 ft. A corridor is continued entirely around the hall on the ground floor, and gives access to the hall and some of the smaller rooms. The council chamber and committee-rooms are placed on the first floor at the left-hand end of the hall, and are approached by a staircase at the same end. At the other end of the hall two staircases are provided, and the spectators'

gallery is placed between them over some of the ground-floor rooms. A loggia, with coupled Ionic columns, is planned on the first floor along the front of the large hall, above the ground-floor corridor, and forms the central feature of the principal elevation. A similar loggia runs along the back of the hall. The elevations do not reveal much originality, but the perspective is a striking piece of work, with its green sky, green and blue shadows, and gaudy figures. It is roughly drawn and does not tally with the elevations. The projection of the cornice is increased; the number of modillions is reduced about one-half, and their size nearly doubled; and the pitched roof of the hall is not shown, although from the point of view selected it would, we believe, be seen.

The same artist appears to have been responsible for another perspective submitted in the competition, but whether this is an alternative design submitted by Mr. Forbes or the work of another architect we do not know.

Messrs. Edmund W. Wimperis and Hubert S. East, of 6, Vigo-street, W., have gained the third place. The hall is placed as in Mr. Forbes's design, but the entrance is in the middle of the principal front. There is no entrance-hall worthy of the name, but merely a kind of double corridor, leading to the corridor which runs along the front and ends of the large hall. All the rooms are on the ground floor the cloakrooms being arranged on each side of the principal entrance, and the committee-rooms being as far from the council chamber as they could possibly be placed. The hall measures 96 ft. by 60 ft., and contains tiers of seats instead of a gallery. The hall is unnecessarily lofty, and externally dwarfs the one-story rooms around it. The central portion is crowned by a dome, against which the pitched roofs of the side portions abut. A loggia concentric with the dome projects from the central part of the hall above the one-storied entrance, &c., and the angles between this and the straight walls are masked by turrets of original design. The perspective is a line drawing by a well-known hand, and shows the building to advantage.

The same artist appears to have prepared the perspective of one of the few satisfactory Gothic designs submitted. Externally, this design is an excellent piece of work. The Perpendicular style appeals to the Englishman as being specially appropriate for buildings of this class, and the author of this design had, therefore, good reasons for ignoring the prevailing fashion. The plans are, however, less satisfactory than the elevations. The large hall and the council chamber are placed on the first floor, and the other rooms below. This position for the large hall has also been adopted by other competitors, but with less success; one competitor, not knowing what else to do with the space under the hall, has provided an "entrance loggia and waiting-hall," measuring 79 ft. by 49 ft.!

One of the most striking designs is No. 53, which attracts attention by its clever perspective in greyish green. The Byzantine style has been adopted, and has been worked out in a very able manner. A saucer-like dome covers part of the large hall, which rises above the other portions of the building. Smaller domes of similar character crown the square portions at the ends of the principal front. The central feature of this front is an original piece of work. The building is of two stories throughout, and would be very costly, but the design is decidedly clever and interesting.

No. 45 is a good design in the Renaissance style. The large hall, 92 ft. by 54 ft., is placed as in the second and third premiated designs, but the smaller rooms are differently arranged, the cloakrooms being on the ground floor along the left flank of the building, and the offices along the right flank; the council chamber and committee-rooms are on the first floor, over the offices. Externally the front of the hall rises above the one-storied entrance-hall, and is divided into three wide bays, each containing a large semicircular headed window, across which an entablature is carried at the springing level, and supported between the jambs on two Ionic columns.

We noticed also two good Renaissance designs of a severer type, but were unable to ascertain their numbers.

Many of the designs are quite unworthy of the competition, and if they could be exhibited in Cape Town the architects of the Colony would not, we fear, be led to form a high opinion of English architects. Perhaps we do our countrymen an injustice—it is possible that some of the unsuccessful designs were prepared in South Africa—but we fear that some of the worst are of home manufacture.

LIVERPOOL CATHEDRAL COMPETITION.

THE following is the Report sent in by the assessors in the competition:—

"TO THE COMMITTEE.

GENTLEMEN,—We have carefully inspected the five sets of designs submitted, in competition, for the proposed Cathedral at Liverpool.

It is with much pleasure that we bear our testimony to the great care and pains that the competitors have bestowed on their work, and the admirable response they have made to the invitation of the committee.

The drawings, as drawings, are mostly excellent, and show skill in the working out of many difficult problems.

Almost without exception we see the hand of the master himself and not merely draughtsman's work. This makes the designs doubly valuable.

Out of the five competitors four of them had sent in designs for the Cathedral in the first and unlimited competition. We note with great interest that the new drawings embody much the same general design and character as previously delineated by each competitor. This clearly shows that from the commencement all the four had decided views, and that the second competition proved no temptation to any to deviate materially from their original conception. This seems to us good evidence that from the commencement they had offered of their best.

You may be sure that we, your assessors, feel the great responsibility of our judgment and the importance of this very rare occasion.

What we had to find was not the best, or the most beautiful, drawings, but the best idea, and the finest conception.

Many of the drawings are attractive. But we had to look much further than that. We had to look at the real effect of the building rising to its final completion, at the dimensions and proportions of the different parts, such as the piers and arches of the great nave. We had to look at the practical and feasible aspect of the designs. We had to look for a sufficiently original conception. We had to look for a fine and a noble proportion, combined with an evident knowledge of detail. Lastly, we had to look for that power, combined with beauty, that makes a great and noble building.

In the set of drawings marked 'No. 1' we find these qualities pre-eminently shown. We cannot but give it the first place.

We should recommend that the quasi east end should be drawn with the towers shown, and that a window of fine size and proportion should be shown for that gabled end, one suitable to receive the offered gift of stained glass, a gift that will greatly add to the beauty of the interior.—We are, Gentlemen, faithfully yours,

G. F. BODLEY, R.A.,
R. NORMAN SHAW, R.A."

No. 1 design is by Mr. Gilbert Scott, the grandson of Sir Gilbert Scott.

For our own comment on the report and on the present stage of the competition see under "Notes," p. 530.

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS.

THE usual fortnightly meeting of the Royal Institute of British Architects was held on Monday evening, when the chair was occupied by the President (Mr. Aston Webb).

Mr. Morgan, President of the Cardiff Society, attended for the first time since his election, and was introduced to the Chairman.

The Chairman announced that at the "At Home" on the previous Monday they had a very interesting series of drawings on view of the late Mr. Eden Nesfield. He begged to propose that a very hearty vote of thanks be given to Mr. E. J. May, who lent the drawings and took a great deal of personal trouble in hanging and arranging them for their edification.

The Beginnings of the Egyptian Style of Architecture.

Professor Sir Martin Conway then read a paper entitled "The Beginnings of the Egyptian Style of Architecture," of which the following is an abstract:—

The Egyptian style appears to have arisen about the time of the Fourth Dynasty, and to have rapidly developed during the Fifth. Its elements existed earlier, but not till the Fourth Dynasty were they definitely compounded into an architectural style applicable to buildings in stone. Until recently it was commonly believed that the early dynastic Egyptians employed wood for small and costly edifices. In fact, however, no such Egyptian wooden architecture ever existed. Pictures and models which survive do look like representations of wooden structures—indeed, some of the slender columns depicted have more the appearance of metal than wood. It must be remembered that unpractised architectural draughtsmen, though for their day able artists, invariably represented columns with exaggerated slenderness. Numerous examples exist in the wall-paintings of Roman Italy; as a special illustration the lecturer showed a photograph of Giotto's painting of the façade of the Temple of Minerva at Assisi. The columns that represent tent-poles and the octagonal, or sixteen-sided, columns of the hieroglyphs, were originally of wood. The rest were of reed-bundles plastered over with mud. Both kinds had been copied into stone at the date of the pictures referred to, and those pictures may actually depict stone buildings, little though they suggest that material.

The earlier Egyptian stone buildings had no architectural features whatever. It was mere building, not architecture. The chapel excavated by Professor Petrie was the simplest kind of stone building conceivable. The neighbouring mastabas were similarly destitute of architectural quality; their false doors were inscribed with beautiful hieroglyphs, but there was no attempt to arrange them architecturally.

Down to the middle of the Fourth Dynasty, then, the craft of building in stone had been carried to a high degree of perfection, but it had developed no architectural art. Building whose forms and features were determined by the desire to give pleasure to the eye was only carried out in the old materials of mud and reeds, with which the Egyptians had been familiar from the earliest prehistoric days.

The lecturer described the characteristic features of a stone building in the developed Egyptian style. The walls have an external batter, are surrounded or edged by the torus moulding, and are crowned by the Egyptian gorge. The supports are either piers—square, octagonal, or sixteen or more sided—or clustered columns made in imitation of bundles of papyrus-stems or reeds, with a flat circular stone for base, and with a capital made in imitation of a group of flowers, buds, or palm-fronds. There are porticos and halls of columns, and there are dark chambers and passages. Only the piers, the porticos, and the halls of columns can have descended in direct sequence from the early stone buildings, and it is not to be supposed that such elements were lacking in contemporary or even prehistoric mud buildings. It may therefore be safely declared that all the features and principles of Egyptian architecture were invented by the mud builders, and were afterwards directly translated into stone. The outward batter of the walls of stone buildings had no meaning in stone; it was borrowed from mud-brick. The Egyptian gorge copied the old fringe of palm-frond tips with which mud walls once habitually terminated. The torus moulding was a translation of the bundle of reeds that protected the tender angle of termination of a mud wall.

Discussing the question as to when this translation took place, and in what kind of building, the lecturer said that the well-known sarcophagus of Khufu-ankh at Cairo throws a welcome light upon this problem. It represents a palace, apparently built of crude brick with wooden fittings. The vertical grooving along the top of the lower part was doubtless intended to represent the gorge. If at that time the gorge had actually begun to be imitated in stone as a cornice to stone buildings, the mason who carved this sarcophagus would have known better than to represent it by flat grooving. The fact that he flattened it seems to prove that, though at the time the gorge was in common use as top member of a crude brick building, it had not yet taken its place in stone building. The sarcophagus of Menkaura, as compared with that of Khufu-ankh, shows a development. Like the latter, it imitates a building, usually said to be of wood, but really of mud and reeds, or mud-brick, perhaps, with wood fittings. This building is surmounted by a fully-developed gorge cornice, whilst each façade is surrounded by a torus moulding. Here, then, is the Egyptian style completely formed. It must have sprung into existence between the days of Khufu and Menkaura.

The Fifth Dynasty has left us several actual examples of stone architecture containing decorative features, such as a mastaba at Sakkara, where the architrave of a portico is decorated with a stone gorge rather tentatively employed.

The Fifth Dynasty tomb of Ptah-Shepses at Abusir, excavated in 1893, when fragments of lotiform capitals and columns were brought to light, yielded results of the highest importance for the present inquiry.*

The tomb was approached by a great court, which was surrounded by a colonnade of twenty square piers. At the end of the great court was a porch of two columns, whereof only fragments remained. In a lateral chamber, which contained the statues of the deceased, were fragments of the two columns that had supported the roof. The base and lower portion of the shaft of one were in place, and enough fragments of a capital were found to enable a complete restoration to be made. Column and capital in each case were hewn out of a single block of limestone. The circular base is simply bevelled off at a slope of about 45 deg. Its diameter is large in proportion to that of the shaft. Such large bases were required when they were used instead of a foundation to spread the pressure of a shaft over an area of ground large enough to support it. This column and capital are, beyond question, the finest that have come down to us from ancient Egypt, as far as workmanship and carving are concerned. The proportions of the capital are excellent. The abacus is a thin rectangular tablet. In the Middle Empire it was made thicker. It is only by comparing these Abusir fragments with later examples of the Lotiform order, such as the Middle Empire rose granite column in the British Museum, that its surpassing merit becomes obvious. The conclusion may be justified that the Memphite architecture of the Fifth Dynasty was highly meritorious, and may have been the finest ever produced in ancient Egypt, or even in the world before the great days of Greece. The date of the Abusir Column is about 3600 B.C.

The pyramid field of Abusir is being systematically explored by the German Oriental Society. They have already laid almost entirely bare the Pyramid Temple of the Fifth Dynasty King, Ra-en-user, which is earlier in date than Ptah-Shepses' tomb. In Ra-en-user's temple the gorge cornice and the colonnade of clustered columns were fully developed. The courts were floored with basalt. In the great court was a red sandstone cistern to catch the rainwater. A drain led this out to another red sandstone cistern. The base of the walls was also of basalt (in places of granite), which explains the black-painted dado so frequently found in tomb chambers of the Old Empire. The walls, above the basalt foot, were all covered with fine plaques of white limestone, delicately carved and painted, whereof only fragments remain. The side posts of the magazine doors were of red sandstone. The only fragment of sculpture found was a noble head of a colossal granite lion. There were also remains of an alabaster altar embellished with reliefs of the various nomes.

Throughout the period when true stone architecture was arising in Egypt, pyramid building steadily lost its charm for the kings. Khafra's pyramid was smaller than Khufu's, Menkaura's than Khafra's; their successors were yet smaller. The reason evidently was because, as time advanced, less of the mass of human energy under the command of the king was devoted to pyramid building, and more to building of some other sort.

The lecturer next considered the character of the divine temples of the Old Empire. Fragmentary remains prove that Khufu and Khafra built temples of granite. The shrine was the chief feature, and its fossilised likeness is preserved as the Holy of Holies of almost every later temple. All of them possess one marked characteristic. Entering through the great pylon, and proceeding inwards from court to court and from chamber to chamber, there is a steady diminution in height the further you advance. The reason for this is plain. The normal temple plan resulted from a series of accretions. An Ancient Empire shrine received additions, mostly in front, in the Middle Empire, and successive further additions in the New Empire. Often the old parts were ruinous, and had to be rebuilt, but, according to the general Egyptian way of doing things, the habit was to reconstruct the old parts on the old scale, and as far as possible in the old style, and to add the new parts in the new style. The Middle Empire built on a larger scale than the Ancient Empire, the Eighteenth Dynasty on a larger scale than the Middle Empire, and the Nineteenth larger than the Eighteenth. Thus a big temple, resulting from the accretions of various building periods, naturally grew in scale from shrine to pylon, and this feature was adopted into the style of temple design, so that even a wholly new temple was built in that fashion. From these considerations we may safely conclude that the Ancient Empire temples were small in scale. The best of them, the important royal temples, were probably built of the hard and precious rocks, such as granite, diorite, porphyry, and alabaster. We have every reason to conclude that all the later types of column and capital were fixed at this time. The lotiform, palmiform, and campaniform or papyrus orders are all represented in the painted reliefs of the Ancient Empire.

Describing the Fifth Dynasty divine temple revealed by the recent German excavation, the lecturer said that it was built near the Abusir pyramid field by the King Ra-en-user in honour of the sun-god Ra. Instead of a shrine its chief feature was an obelisk raised on a massive base covered with great blocks of granite at the foot, and with fine white limestone above. The outer walls were built of big blocks of hard, yellow limestone. The inner walls were badly built, but covered with plaques of finest limestone carved with delicate reliefs above a dado painted black. At important points the base of the decorated walls was of granite. The ceilings were painted with yellow stars on a blue ground. The relief carvings were admirable, in the style of the best reliefs in the almost contemporary tomb of Ptah-hotep.

The lecturer referred to the evolution brought about in temple building by changes in religious ceremonial, and by the gradual ousting of the laity from the temple services, and the rise of the priestly caste. Finally he considered the character of the sculptured decoration applied to old Empire temples, and the system of its distribution. No Egyptian sculpture in the round ever surpassed that of the Fifth Dynasty. The mural decorative sculpture of the Old Empire was correspondingly excellent as far as it went, but it suffered from a great defect that sculpture in the round escaped. It was governed by faulty Egyptian perspective. A figure in the round could be absolutely copied from Nature, but a figure in low relief could only be truthfully represented by the aid of conventions not yet invented. Quality of surface is the great test of bas-relief. The best Fifth Dynasty work in this kind is sometimes good, though seldom to any high degree. The best result is attained when the artist treats vegetable forms, especially thick growths of lotus and other luxuriously growing plants. It is evident that he relied strongly upon colour for decorative effect. Where the colours have survived an excellent effect is obtained. The Egyptians attained to perhaps the most perfect comprehension of how to design and carry out a decorative scheme in one logical style ever attained by any people. Every form they employed, whether in their architecture or their sculpture, their paintings, their writing, their decoration of every object large or small, employed for whatever purpose, was the consistent outcome of a single artistic ideal. All parts therefore harmonised together.

Egypt has impressed the prestige of its mighty name as a country of great buildings and noble art upon the imagination of succeeding generations. We are only now beginning to realise that the reputation of Egypt as an ancient artistic nation, so far from being exaggerated, does not attain the level it deserves.

Mr. R. Phenè Spiers, in moving a vote of thanks to Sir Martin Conway, said the paper not only brought them up to date and took account of the latest discoveries, but he thought it was the first time that an attempt had been made to suggest a period approximately for the commencement of what Sir Martin Conway considered to be a style of architecture. Of course there might be some differences of opinion as to the point at which that was taken. The reader of the paper had mentioned the fact that the earlier tombs are intended imitations of the palaces or the residences of the deceased—that they were cut in stone in imitation of the houses or palaces which were built in a different material, whether of reeds or crude brick. The question arose whether when they translated the structure of another material into stone was that architectural work. It was symbolical, but how far did it constitute architecture? Because the gradual imitation of these forms had led to all architectural forms. They began by copying, and then they decorated, and it became an architectural feature. The only difficulty was to decide when, and at what period, the building should be looked upon as being of such good proportions and of such refinement in design as to constitute an architectural building, and not merely a building of ordinary character. It was difficult, of course, to grasp the whole paper, and he could only take certain paragraphs to refer to. First, as regarded the slender columns which Sir Martin Conway showed them, viz., the representatives of much larger features in the Temple of Assisi, but there were still in existence, however, columns of an extremely slender proportion in the tombs of Beni Hasan. He did not recollect that the subject had ever been taken up, but it occurred to him when he first saw it that it was an attempt at imitation of the interior of a tent. It was all carved in the solid rock, and the roof sloped out like the pent roof of a tent. The columns were, of course, quite insufficient to carry the stone roof, and they were carved in imitation of the tent poles employed in tents, and these columns were quite as slender as those which Sir Martin Conway had mentioned, and it seemed to be, so far as one could judge, of a more beautiful detail than the columns at Beni Hasan. In one of the temples discovered by the Germans, Sir Martin said, the columns were of papyrus, and not lotus. How could the difference be distinguished? He imagined that the series of columns bound together were all lotus plants, but that at times the capital, instead of being a series of lotus buds, had the papyrus flower on it. There was a good deal of discussion, of course, as to whether wood was used in the construction of these earlier tombs, and he thought Sir Martin Conway was right in saying there was no wooden construction, but it was a question whether the outside of the larger tombs were not covered with timber. After all, if they accepted the fact that they were of reeds, why were the reeds square?—as they were decidedly in the tomb of Mycerinus. Sir Martin Conway had given them periods of wattle and mud, and then of crude brick; but he should think that the crude brick would have been likely to have been equally as early as the other, but that was a question not possible to go into. Those who had not been in Egypt were not aware that almost all the modern buildings on the Nile suggested in the distance ancient temples. As they approached a village in the distance the houses looked like a series of large pylons. The huts and pigeon houses above were all built in crude brick, and required a wide base to support the brick above, and that accounted for the batter outside. He would say no more on the paper that night, but he thought it was a subject which would lead to a good deal more discussion and a great deal more inquiry. Sir Martin Conway had thrown an altogether new light on the subject, and had attempted to fix a period at which architecture began, and that was a subject which it would be of extreme interest to discuss.

Professor Beresford Pite, in seconding the vote of thanks, said he was afraid he could bring to the discussion but a certain spirit of inquiry, which he confessed was aroused on that interesting evening when Professor Petrie read what had been described as an epoch-making paper. If he remembered aright, in that discussion Sir Martin Conway interjected an observation, that the science of architecture proceeded upon the basis of imitation—the imitation of some anterior method of building in another material. He had prophesied to himself that night an interesting conflict between the Slade Professor of Cambridge and the editor of their best-known architectural journal, who, he believed, on that occasion took a very different view. Now, he did not know if he was right, but he had a suspicion that the paper had been prepared with that militant intention, and the thesis so clearly put before them had been prepared with a view to attack. He was not going to attack it. He would not say that the thesis appeared to be incapable of being attacked even in the presence of what they knew was the development of Greek architecture—in the strange delight which they seemed to have taken in imitating in a glorious building material construction in

* Sir Martin Conway eulogised Mons. G. Foucart for his labours in connexion with this important find, and passed high encomiums upon his "Histoire de l'Ordre Lotiforme."

an inferior material, following the lines which had been so clearly laid down for them with regard to the progress of the Egyptian style. But they turned their minds westwards and found that they were living in an empire —the Western Empire of ancient Rome, in which a magnificent architecture grew up in masonry and out of nothing but masonry. Only in a very indirect—he was going to say only in a very theoretical—manner could it be said that Gothic architecture owed anything to preceding methods of construction in any material. In some decorative details they traced illustrations of the forms seen in other countries. They traced representations of the Greek volutes in Gothic capitals, but the science and the early art of English architecture grew up and developed out of a delightful combination of constructive talent and æsthetic taste. There was a singularly perfect engineering in English Mediæval architecture, and a singularly fine æsthetic taste combined. But in Egypt it seemed that there was a high constructive ability and a high technical ability in the working of stone, which was intensified in the Temple of the Sphinx. This was the only one he had seen, and his hair almost stood on end when he saw Sir Martin Conway put on his own drawing what he made years ago. As to the proportion of it, it was drawn from a French plate, and the proportion might be upset by the rather absurd sheikh standing in the foreground. But they found this very high dealing with stone without any relation at all to its æsthetic value, and apparently much later æsthetic taste harked back to it, as children delight to imitate one material in another. That expression of pleasure seemed to be the only *raison d'être* for the perpetration in masonry of the crude forms of rush and mud dwelling. There were a number of ideas that Sir Martin Conway had gleaned and put together for them which he found a little difficult to relate in a hurry. The relation to the tent was dissimilar essentially to the relation to the rush hut, and the rush building, again, was dissimilar in method to the sun-dried brick building. They had the tent-peg column and the batter wall, and the torus from the rush and mud, and then they had the niche or recess from the brick construction clearly. That all these methods of construction existed side by side and died; that they were replaced by the stone construction, and then that, at a later period, the æsthetic instinct went back and called for the rush and mud and tent and brick material for æsthetic expression, was a vastly interesting statement. He hoped it would not be attacked successfully. It opened up a new vista in the operations of the architectural mind. They lived in a period when the architectural mind was operated in very different ways. Sir Martin Conway skilfully drew their attention across the Atlantic, where they are building up with steel something of an American style of architecture to suit the expansive intellect and the expanding pockets of their American brethren. But that steel network had imitated and adopted—for it could do nothing else—the methods and details and forms of the effete architecture of the Western Roman Empire. It would be interesting to cast a prophetic eye forward to the day when some New Zealand Slade Professor of Fine Art would come along to the old world and wonder how our brethren across the Atlantic succeeded in putting their minds back behind the fine details of our own work and example, and lay hold of the decaying remains of stone architecture which had vanished, just as the rush and mud architecture of Egypt furnished an instance of the extraordinary workings of the architectural mind. He anticipated that day with much pleasure.

Mr. E. W. Hudson said he would like to refer to one or two points. One was as to the supposed similarity which they read in their younger days was shown between the temples of India and the temples of Egypt. He believed the temples of Elephantine had been often referred to as being their prototypes. It would be interesting to have any information on that matter, for he believed the similarity had been so great that natives of India, when confronted with monuments in Egypt, had been so taken with the similarity, that they at once scrambled to perform their religious duties in the sight of the ancient Egyptian remains. Another thing which struck him was in the paper which Professor Petrie gave when he showed a very interesting diagram of a domical structure in wattle and reed, and it seemed to him that he had seen nothing of the kind translated into stone; any information as to that would be very interesting, and they found by that view that barrel vaulting was by no means an unknown thing, and yet the vaulting was never adopted in open buildings in the Egyptian period. If the representation, which he believed was carved on stone, really represented a wattle and mud structure, that had never passed into a stone form. Another thing which struck him was the great advance in the last few years in their knowledge of dates of structures in Egypt. They had nothing of that in the early books, and no alternative between the astonishing statements of the Egyptian priests as to buildings being 17,000 years before Christ. Those things seemed to be passing away, and they seemed to be getting much more accurate ideas of the epochs in which these different structures were put up.

Mr. R. F. Chisholm remarked that with regard to the similarity between the temples of India and the temples of Egypt he might say that there was the greatest possible similarity between them, but the subject was so large a one that he could do little more than refer to it. The temples were not only the same, but there was the same idea of the spirit of the departed visiting the tomb. In a tomb he had to go into at Baroda he found a couch, a dressed figure, and a plate of rice. The couch was for the spirit of the departed to recline on, the figure was to give it corporeality, and if it was hungry it would eat the rice. There seemed to be exactly the same idea; but to work the subject out and get at the real connexion would of course take a long time.

Mr. Hugh Stannus said he had been much interested in the subject of the paper. He had brought with him a few photographs which he had taken while in Egypt lately, thinking that they would perhaps help Sir Martin Conway in his demonstrations about the evolution of the columns. Mr. Stannus proceeded to deal with the photographs, which were arranged on the wall, and included views of the columns in the tomb at Beni Hasan, the Temple near Der-el-Bahri, and a number of other ruins near Karnak. He pointed out an example of the square piers which are used in the granite Temple near to the Sphinx, and said that no doubt the architect found the value of having the square piers, inasmuch as they gave such splendid opportunity for storiation. Referring to the photographs showing the lotus-bud treatment, Mr. Stannus hesitated to use the word "capital." He thought the word "capital" was almost a misnomer in the case of Egyptian architecture, for they had no idea of making a capital. The Egyptian architects did not set out to make what is called a capital; they knew nothing at all about it. He had the idea, after looking at the matter in all ways, that they used a square wooden pillar. He believed it was timber rather than a tree because they saw it square at the top. At certain festivals, such as the festival of the Great Overflow, they would decorate the shafts which supported their building with nosegays of this lotus flower, which, by reason of its great abundance at the overflow, became symbolical in the minds of the Egyptians of the goodness of the gods. Thus they decorated these shafts and tied it round with five-fold bands, but they had no idea of making a capital. Obviously the lotus sometimes was in bud and sometimes in flower, and the architect when he desired to perpetuate that in the House of the Gods would have to choose between the two. Now the buds require a less quantity of granite, and thus when they built in granite they chose the bud treatment rather than the open flower. He thought, perhaps, Sir Martin Conway would tell them, from his intimate knowledge of Egypt, whether there exists any granite shaft-head imitating the large open flower. There might be, but he knew of none. He knew that the open flower was used in the Eighteenth and Nineteenth Dynasties, but then it was cut in sandstone and not in granite.

The Chairman said they were most fortunate in having had the paper read that night, which he had no doubt would be called an epoch-making paper later on. They had two of such papers this session—one that evening and the other that of Dr. Evans on Crete. Personally he had no knowledge of the country, and had not given his study to it, so that he would be quite unnecessarily occupying their time if he made any remarks upon the paper. He would only therefore express their feelings of indebtedness to Sir Martin Conway for the great research the paper showed, and for his coming to read it to them that night.

Sir Martin Conway, in reply, said the question about the papyrus and lotus column was one he would briefly answer. The difference between the bundle of papyrus stems and the bundles of lotus reeds was that the papyrus stems were, roughly speaking, triangular in section. It was not necessary to assume that wood was used because of the square shape of the façade decoration, because it naturally came from the use of brick. The square rectangular grooving was characteristic also of the early crude brick architecture of Chaldea. It was a common bond between the prehistoric architecture of Egypt and Chaldea. As to any connexion between the architecture of India and Egypt he would not like to make any answer. All the stone architecture in India was quite late as compared to the Egyptian, and there was probably no direct connexion between them. There was no instance of a stone dome, of course, in ancient Egypt. The dome in mud appeared to have been employed on a small scale in Egypt as well as in Mesopotamia—possibly in small cottages, but not in any building of any size that they knew of. The origin of the dome was one of the great unsolved problems of architectural history. He quite agreed with Mr. Stannus as to talking about "capitals." Strictly speaking they were not capitals, and in all the earliest columns the capital was part of the monolith, and was not a separate member—it was merely the upper part of the column. One called it a capital for the sake of convenience. In the Ancient Empire all the columns were monoliths, and also in the Middle Empire, but later they were built up. As to the nosegay decoration he would not like to say much. It would be very nice to agree with it, and one of the greatest authorities was with Mr. Stannus that the idea of these floriated capitals was taken from the decoration of columns on festive occasions. But on the earliest columns they knew of the weight was laid straight on the top of the bud, and that could not have been the result of directly copying any use of actual flowers. He thought they would have to wait before they could assert or deny that this was the origin of the capital. In the granite forms of the earliest period they had the lotus-bud, but there was also the palm-formed capital in granite of the Fifth Dynasty. He was afraid the subject had been put before them incompletely, but the object of the paper was rather to bring forward the subject for discussion than to solve a problem.

The Next Meeting.

The Chairman announced that the next meeting would be a business meeting, to be held on Monday, June 8, to receive the report of the scrutineers *re* the election of Council and Standing Committees, and to elect candidates for membership. The meeting would be preceded by a special general meeting, when the Council would move a resolution "that the words 'during five years from the date of this provision by the Privy Council' be omitted from the proviso of by-law 9."

THE ARCHITECTURAL ASSOCIATION:

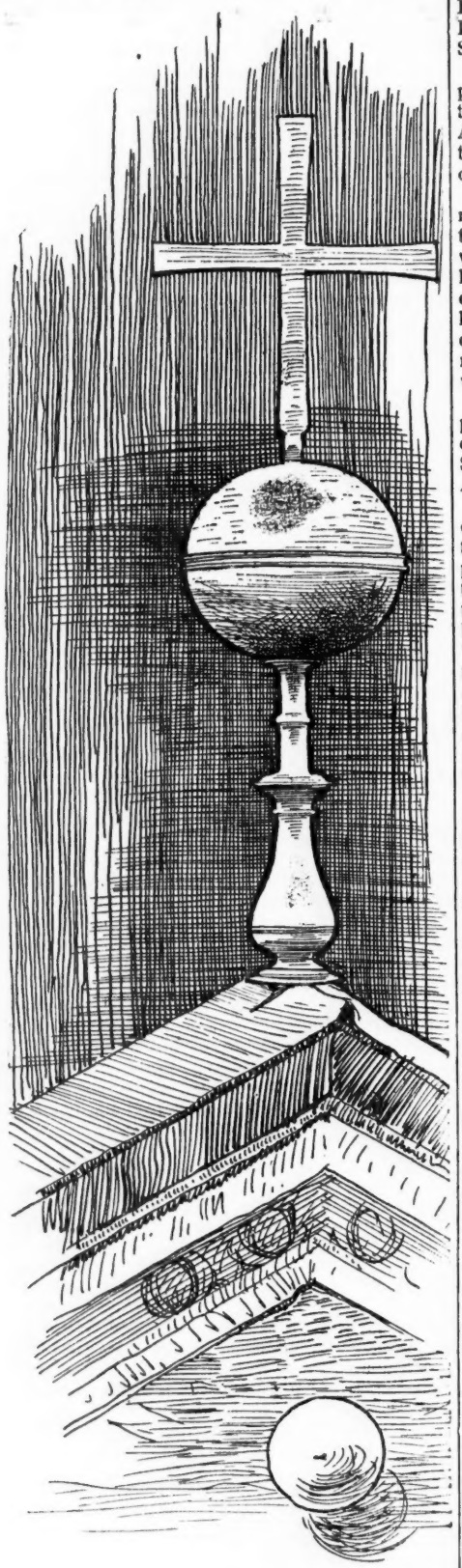
MEMBERS' SUPPER.

THE Members' Supper of the Architectural Association took place on Friday evening last week, at the Hotel Great-Central, Marylebone-road, Mr. H. T. Hare, President, in the chair. The company numbered nearly 150, and among those present were Professor Hulme and Messrs. Cole A. Adams, M. B. Adams, A. T. Bolton, G. B. Carvill, F. D. Clapham, Max Clarke, J. D. Crace, E. Guy Dawber, W. M. Fawcett, P. L. Forbes, Owen Fleming, Alex. Graham, E. Greenop, W. B. Gwyther, A. H. Hart, Francis Hooper, W. J. Locke, H. P. G. Maule (hon. secretary), Arnold Mitchell, J. Murray, W. A. Pite, W. H. Seth-Smith (past President), S. Sparrow, Hugh Stannus, Leonard Stokes (past President), J. MacLaren Ross, H. Tanner, jun., R. H. Weymouth, W. H. White, W. Wonnacott, and D. G. Driver (secretary).

No speeches were delivered during the evening, but the following gentlemen assisted in making the evening a most pleasant and enjoyable one:—Dr. F. Byrd Page (conjuring) and Messrs. Harrison Hill (humorous recitals and pianoforte sketches), Seth-Hughes (solo), and Haydn Wood (violin).

METAL FINIAL, BRESCIA.

THE sketch of this metal finial was made at Brescia last year. It stands over the pedi-



ment of the beautiful façade of the church of the Madonna dei Miracoli. W. C. G.

THE SANITARY INSTITUTE:

ANNUAL DINNER.

THE dinner of the Sanitary Institute was held on Friday evening last week in the Richelieu and Medici Rooms of the Hotel Cecil. H.R.H. the Duke of Cambridge, K.G., President of the Institute, occupied the chair, supported by the Duke of Northumberland, K.G., Lord Monkswell, Chairman of the London County Council, Rear-Admiral A. Fitz-George, Right Hon. J. G. Talbot, M.P., Sir Francis S. Powell, Bart., M.P., Sir Henry Norbury, K.C.B., Director-General Navy Medical Department, Sir William Church, Bart., K.C.B., President Royal College of Physicians, Sir Henry Howse, President Royal College of Surgeons, Sir Homewood Crawford, Sir Alexander Binnie, Mr. W. Whitaker, F.R.S., Chairman of Council of the Institute, Professor H. Robinson, Professor H. Adams, Messrs. T. W. Aldwinckle, T. W. Cutler, E. T. Hall, F. H. A. Hardcastle, A. Saxon Snell, H. D. Searles Wood, H. Tanner, Dr. A. Wynter Blyth, Dr. W. Collingridge, Dr. Louis C. Parkes, Dr. J. F. J. Sykes, E. White Wallis, Secretary of the Institute, and others.

The toast of "The King" having been proposed by the President and suitably honoured, the Duke of Northumberland proposed "Queen Alexandra, the Prince and Princess of Wales, the Duke of Cambridge, President, and the other Members of the Royal Family."

The Duke of Cambridge, in the course of his response, said the Institute had no better friend than its present President. He considered the work of the Institute a most useful work, and he had gladly undertaken the duties of President, and though he was in his 85th year he hoped to be able to preside over the Institute dinner next year. No one in that room took a more lively interest in all that concerned the welfare of the Institute than he did.

Sir Francis Sharp Powell, Bart., M.P., proposed "The Navy, Army, and Auxiliary Forces," coupled with the names of Inspector-General Sir H. F. Norbury, K.C.B., and Lieut.-Colonel A. S. Jones, V.C., both of whom replied.

Lieut.-Colonel Jones said that the Army could profit very much from the teachings of the Sanitary Institute, which professed to teach practical scientific sanitation. In all our wars the loss by sickness and the want of care in the selection of camps and watering places had been far more disastrous than from wounds. The Army needed to pay more attention to the teaching of that Institute that cleanliness was everything in sanitation. If the soldier could be taught to be cleanly in his habits, to avoid foul water wherever he could, and to live as much as possible in the open, fresh air, he would be benefited immensely.

Sir Henry Howse next proposed "The Houses of Parliament." He said that the connexion between the Institute and the legislative assembly was shown in the fact that the Institute could bring a suitable amount of influence to bear upon Parliament in passing useful sanitary measures, and in opposing those of a pernicious tendency. To show what steps the Institute took to secure sanitary legislation, he might mention the various matters in which they had been interested during the last few years—*i.e.*, a public health bill, a London water bill, a vaccination bill, an ice cream (Scotland) bill, and a plumbers' registration bill. This year they were interested in the Housing of the Working Classes Bill, the Prevention of Pollution of Rivers and Streams Bill—a most important bill, having regard to our water supply—a Public Health Bill, and the Vaccination Bill—which they would petition against, he was glad to say.

Lord Monkswell having replied for the House of Lords,

Mr. Talbot, M.P., in responding for the House of Commons, said that a limitation, which was not too strictly observed in these days, to improving the health of the people, was the cost: "You cannot help spending the money of the people in improving the health of the people. Subject to that limitation of expense, there is no project, well and fully considered, which bears on the health of the people, which the Houses of Parliament are not ready and anxious to promote."

Sir William Church then proposed "The Sanitary Institute." The condition of the Institute was most flourishing, as it had 3,000 members and associates, a capital of some 16,000*l.*, and an income last year of 9,941*l.* It was quite true that in the early periods of the world and of our own country there had been rules and regulations for the preservation of health and the prevention of nuisances, but the last three or four decades of the past century saw more advance in medicine and sanitation than all the ages that had gone before. He would urge the Institute not so much to work for greater powers of law as to do, what he believed they were doing, *i.e.*, to try and spread knowledge more widely among the people. The Congresses of the Institute must do much good in that direction, for they attracted public attention, and stirred up the corporate bodies of the cities in which the congresses were held. The Institute was also doing good in publishing a journal in which all the newest subjects of sanitary science were dealt with, and they also gave a large number of lectures and demonstrations on sanitary subjects throughout the country. Last year they held 470 such meetings, which were attended by 22,000 people. He was glad to find that it was proposed to extend and rebuild the Parkes Museum at Margaret-street—a museum which was of great value to those who used it. He had paid frequent visits to that museum for his own personal information, and he had never gone there without learning something which he wanted to know.

Mr. Whitaker, Chairman of Council, in reply, said that an institute like theirs combined, in the work it carried out, various classes of the community, and among their members were 22 ladies and 107 associate ladies, while 261 ladies had passed the examination. The work of the Institute was also a good deal varied, and one important part of that work was the examinations. In most other countries those examinations would be conducted by the Government, but in this country a great deal of work was left to private endeavour, which, in this country, did a lot of good work, and while that was so there was no occasion for Government to interfere. The examinations were conducted by an excellent set of unpaid examiners, who did their work, and did it well, for the love of it. As to extending and rebuilding the Parkes Museum, while they hoped to do that they were not yet in a financial position to do so. How were they to get the money for the purpose? Perhaps the County Council, which seemed to guarantee expenses, would help them. Although a great many able men gave much valuable time and labour to the Institute, still it was necessary to have paid officials, and the Institute was to be congratulated on its staff, and especially on its secretary, Mr. Wallis. The Institute consisted chiefly of three classes, *i.e.*, medical men, engineers, and architects, and the Council was chiefly composed of a tolerably equal number of those three classes. One great aim of the Institute was to apply knowledge to public good, and while it did that he thought it would succeed.

The proceedings then terminated.

THE SURVEYORS' INSTITUTION.

A MEETING of the Surveyors' Institution was held on Monday evening at No. 12, Great George-street, Westminster, when the discussion was resumed on Mr. W. Trustram Eve's paper on "Modern Methods of Valuation of Manurial Residues."

The following is the result of the Professional Examinations, 1903, of the Institution:—

The following Student Candidates have passed the Examination for the Professional Associateship:—

B. G. K. Allsop, London; W. W. Batstone, Wandsworth Common; H. C. Beaven, Enfield; V. L. Berrie, Tooting; F. G. Bliss, Cheapside, E.C.; D. F. Broome, Highbury, N.; R. H. Burstow, Hailsham; H. Clark, Balham, S.W.; C. J. Clements, Mansfield; L. C. Coates, West Dulwich, S.E.; C. A. S. Collyer, Woking; H. C. English, Folkestone; C. S. E Evans, Haverfordwest; J. H. Fenning, Bedford; J. A Flatt, Wanstead, N.E.; A. H. Fleuret, Barnes, S.W.; M. S. Glasier, Wimbledon Park, S.W.; T. M. Glasson, Aspatria; T. K. Gloag, Clapham Junction, S.W.; F. H. Godding, Canonbury, N.; P. W. Goodwin, Hoylake; J. C. Grierson, Liverpool; M. P. Hall, Hampstead, N.W.; E. R. Hawkins, Downham Market; P. G. Hay, Wallington; H. A. Hinton, Highgate, N.; N. L. Holbeche, Birmingham; E. Howard, Wanstead; J. F. Ingram, Bedford; E. C Jarvis, Upper Tooting, S.W.; W. I. Johnson, Stamford; P. Kent, Colwyn Bay; F. W. Knight, Wimbledon, S.W.; H. G Labdon, Paignton; S. Lancaster, Sandgate; J. C. Lucas, Lewes; W. Madge, London; E Minors, Wolverhampton; H. H. Mitchell, Cheltenham; R. C. Moore, Stamford Hill, N; J. E. Mundell, Lewisham, S. E; O. T. Nettelton, Kensington, W.; H. P. Nye, Battersea, S.W.; R. B. Pargiter, Leamington; H. F. V. Parrott, Hayes; M. D. Parsons, Exeter; C. F. Peile, Whetstone, N.; G. L. Pepler, Croydon; C. N. Pilpot, Wickham, Hampshire; H. H. Poole, Kensington, W.; D. D. Porter, Hutton, Essex; W. P. Puddicombe, Swansea; E. B. Reed, Uckfield; G. A. Rowlandson, Penrith; H. G. Russell, Sutton; S. R. Sackett, Orsett; A. Salwey, Broxbourne; P. J. Seale, Southborough; F. R. E. Sladdin, London; D. H. Smith, Southend-on-Sea; H. V. Smith, Reading; S. W. Smith, Cheshunt; C. T. Steward, London; N. D. Stewart, Downton; A. B. Thornton, Woodford Green, Essex; *S. J. Tillyard, Norwich; W. Tomlin, jun., Andover; E. J. Turner, Saltaire; F. Le Couteur Utterton, Lewes; A. A. Vigers, Hersham, Walton-on-Thames; J. W. B. Walker, Southsea; I. Wall, Huddersfield; S. J. Walter, New Wanstead; F. W. Wheeler, Walham Green, S. W.; †H. Williams, Croydon; A C. Willmot, Aspatria.

* Institution Prize. † Special Prize.

Scottish Candidates—H. C. Harland, Drymen, N.B.; G. S. Henderson, Kilmarnock.

The following non-student candidates have also passed the examination for the professional Associateship :—

A. E. Bare, Wandsworth, S.W.; F. G. Bateman, Ealing, W.; F. G. Baxendale, West Norwood, S.E.; H. Bayley, Fishguard; E. C Baynham, Maidstone; H. B. Beddall, Bedford; C. E. Bedford, Acton, W.; H. W. Binns, Richmond, Surrey; A. N. Blake, Gosport; R. C. Bristow, Clapton, N.E.; W. Bristow, West Norwood, S.E.; W. Broadbent, Horsforth, near Leeds; A. Bromley, Croydon; R. C. Bromley, Crouch End, N.; A. J. Burge, Kingston-on-Thames; F. W. C. Chartres, King's Lynn; H. O. Clark, Elgin-avenue, W.; P. B. Coates, North Curry, Somerset; W. J. Cornwell, Barrow-in-Furness; H. Cottam, Kendal; H. Crump, West Hampstead, N.W.; H. G. Culver, Twickenham; H. I. Cundy, Stratford; H. A. Cutler, Croydon; L. O. Davies, Ealing, W.; R. W. Davies, Wallingford; T. H. Davies, Cardiff; F. Dawkins, Bournemouth; G. F. Deane, Reading; J. Egremont, Buckfastleigh; E. Elder, Blackheath, S.E.; E. J. Fairchild, South Norwood, S.E.; A. M. French, Maidstone; P. R. Genders, Clapham Common, S.W.; S. H. Gilbert, Mill Hill Park, W.; H. E. Goodwin, New Cross, S.E; G. P. Gore, Chester; O. Griffiths, London; J. B. Gripper, Woking; G. J. Hagger, Redhill; W. Harrison, South Lambeth, S.W.; S. H. Hayllar, Edenbridge; F. S. Henniker, Balham Park-road, S.W.; W. D. Heskett, Penrith; F. Hewitt, Streatham Hill, S.W.; * † A. J. Hoare, Clapham Park, S.W.; C. S. Holditch, Ivybridge; P. L. Hopkins, Pontardawe; G. M. Horder, Ealing, W.; F. A. Houblon, Bishop's Stortford; F. Howkins, London; ‡ A. P. Ker, Corbridge-on-Tyne; F. V. Kirk, South Norwood, S.E.; G. A. Lambert, Anerley, S.E.; A. B. D. Lang, Weybridge; A. R. S. Leaning, Brixton, S.W.; C. Lee-Wright, Bristol; P. J. Lindsell, Hitchin; R. Living, Plaistow, E.; L. H. Lloyd, Harrow-on-the-Hill; S. F. Lunniss, Chiselhurst; A. R. Margesson, Worthing; R. H. J. Mayhew, Anerley, S.E.; W. E. S. Milne, Hendon, N.W.; W. S. Mockett, Wye; E. L. Moore, Muswell Hill, N.; H. J. Murphy, Colwyn Bay; A. W. Neate, Newbury; P. J. Netten, Stonehouse; C. R. Newborn, Barnet, N.; A. N. Newling, Liverpool; F. G. Newnham, South Norwood, S.E.; J. W. Newton, Leytonstone, N.E.; W. Nixon, Reading; W. G. Orton, Leicester; F. H. G. Osmond-Smith, Cirencester; A. Palmer, Nunhead Grove, S.E.; F. C. R Palmer, London; E. Parkinson, Halifax; S. H. Pearce, North Finchley, N.; H. C. Pinckney, Penshurst; S. L. Porter, Hutton; J. O. Raymond, Tring; F. C. J. Read, New Cross, S.E.; R. M. Reeves, Sawbridgeworth; W. E. Ringland, London; J. H. Roberts, Aspatria; F. J. Rogers, London; F. V. Rogers, London; F. J. Rose, Upper Tooting, S.W.; J. A. Rosevear, Fulham, S.W.; A. L. Rush, Tunbridge Wells; J. H. Salmon, Streatham Hill, S.W.; F. L. Sanders, Chesham; T. A. Savage, Manchester; J. Scott, Putney, S.W.; J S. Shotton, Croydon; J. H. Slade, Upminster; C. Smith, Totteridge; F. H. Smith, Mansfield; H. Smith, Chelmsford; F. E. Sneath, Hendon, N.W.; N. L. Sparke, Deal; F. A. Spencer, Highbury, N.; G Spyer, West Hampstead, N.W.; H. S. Stewart, Wimbledon Park, S.W.; P. Strudwick, Bromley; J. J. Strutt, Witham; W. I. Tait, Nuneaton; J. J. Taylor, Norbury, S.W.; E. J. Thomas, Gosport; J. C. Thompson, Leicester; E. P. Turner, Addiscombe, Croydon; E. Underwood, Earl's Court, S.W.; L. C. Veale, Finsbury Park, N.; H. J. Walker, Wigan; H. A. C. Wallace, Seven Kings; E. M. Wason, Blair, Dailly, South Ayrshire; E. W. Watts, Anerley Park, S.E; F. S. Watts, London; C. A. Webb, Upper Tooting, S.W.; C. E. Westbrook, St. Albans; J. F. Wilkes, Saffron Walden.

Scottish Candidates—B. L. Emslie, Easterton, Birnie, Elgin; N. M. Kerr, Kelvinside, Glasgow.

Irish Candidate.—H. W. McComas, Monkstown, Co. Dublin.

The following Professional Associates have passed the Fellowship Examination in Division IV. :—

J. H. J Appleby, Fareham; W.H. Bamford, London; A. G. Bradshaw, Lancaster; F. H. Bramley, Sheffield; W. H. Brown, Herne Hill, S.E; C. V. Cable, Hartley Wintney; H. F. Cobb, Higham; J. F. Cocks, Wye; H. C. Cole, Finchley, N.; O. F. Cooke-Yarborough, Wootton Bassett; E. J. Cory, Rye; A. W. Crampton, Mansfield; C. Dalgliesh, Acton, W.; F. S Daniell, Colchester; H. Dann, jun., Gravesend; L. W. David, Llandaff, Cardiff; W. R. Davidge, Teddington; J. B. Densham, Purley; C. H. Dinwiddy, Greenwich, S.E.; E. M. Draper, London; A. C. Driver, London; J. R. F. Driver, St. Albans; C. J. Elgar, Wingham; A. Elliott, Liskeard; R. L. Ellis, London; W. Fox, Bournemouth; F. A. S Goodbody, Bristol; H. C. Heath, Westcombe Park, S.E.; F. R Hebden, London; R. Hewett, Seale, near Farnham; **A. W. Hosegood, Williton, Taunton; L. U. Hubble, Hunton, near Maidstone; M. G. Humphry, Cambridge; C. W. Ingram, Woburn; R. J. Jenkins, Portsmouth; A. F. Johnstone, Eastbourne; A. B. Jones, London; A. E. Killick, Eastbourne; R. J. Lake, Crouch Hill, N.; G. F. Lawley, Tottenham, N.; C. P. Lawrence, Penrith; F. A. Lees, London; H. G. Leslie, London; J. Lewis, St. Albans; A. W. Lofthouse, Middlesbrough; **§P. T. Maw, Nutfield; F. W. Merrick, Edenbridge; D. Mills, Maidstone; A. E. Mills, Clapham, S.W.; H. J. Moody, Folkestone; F. I. Neame, Faversham; F. W. Parker, London; D. L. Paton, London; H. E. Perks, Bedford; A. E. Protheroe, London; B. T. R. Pyle, Plumstead, S.E.; T. R. Ransom, Upper Tooting, S.W.; S. M. Rowlandson, Durham; A. D. Rutley, Caterham Valley; W. C. Sainsbury, West Hampstead, N.W.; I. Sanders, Southampton; H. C. Sands, Catford, S.E.; J. L. Schneider, Cheshunt; A. K. Smith, Shepherd's Bush, W.; H. G. Smith, Maidstone; H. Soper, Hove; E. J. Stead, Preston; O. F. Stenning, London; C. F. Stone, Carlisle; J. H. Sutcliffe, Hebden Bridge; R. Tanner, South Kensington, S.W.; W. H. Taylor, Nottingham; W. B. Tyler, London; A. C. Vickers, West Kensington, W.; J. G. Weall, Watford; C. C. O. Whiteley, London; H. H. Wigley, Winslow; C. M. Wilford, Aiantstable, Armathwaite R.S.O.; D. S. Williams, South Benfleet; F. Willoughby, Merstham; W. E. Wilson, Manchester; H. J. Wonnacott, East Dulwich, S.E.

Scottish Candidate.—T. R. Canch, St. Andrews, N.B.

Irish Candidate.—R. B. Gahan, Loughrea.

The following candidates have passed the Direct Fellowship Examination in Division V. :—

Messrs. C. Barker, Bromley; A. G. Cross, Westminster, S.W.; F. Harrison, Leicester; A. Roddick, Waltham Abbey; E. J. Silcock, Leeds.

* Penfold Silver Medal. † Driver Prize.
‡ Beadel Prize. ** Bracketed equal Crawter Prize.

INTERNATIONAL ENGINEERING, MACHINERY, HARDWARE, AND ALLIED TRADES' EXHIBITION.

THE collection of machinery and miscellaneous products to which this unnecessarily cumbrous title has been given, seems to be entirely lost in the huge area of the Crystal Palace, and the first feeling experienced by the visitor is one of wonder that the promoters could not have secured some smaller and more accessible building for the purpose of the exhibition. Although the number of exhibits is small, many of them are particularly interesting. Nearest to the main entrance is the stand of Messrs. G. W. Rundström & Co., of Sweden, upon which is shown an automatic safety uncoupling device for shafting and machinery. The apparatus, termed the "Pi-coupling," possesses the distinctive features that it applies brake power to the shafting simultaneously with the disconnexion, and that in addition to hanging cords, it is furnished with a disengagement cord, running along the line shaft. The advantages of the arrangement are that the shafting and machinery can be almost instantly stopped by the pulling of one or more cords, the ends of which hang at a convenient height, and that any workman who may become caught in the shafting must come into contact with the horizontal cord, thereby stopping the motion. By pulling a hanging, or by pushing the horizontal, cord, the shafting is brought to a standstill after little more than one-half of a revolution. It would be somewhat difficult to describe the mechanism without the aid of a diagram, but it may be said briefly that the operation of the cord causes a stud in the coupling to leave its position, catching one tooth of a freely rotating ratchet wheel, which is then pressed by springs against a slot-wheel used for communicating motion to the shaft. When the ratchet wheel is acted upon in the manner stated, it forces away from the slot wheel two or more pawls transmitting motion from the driving part of the shaft. The removal of the pawls instantly cuts the connexion between the two parts of the shaft, and further revolution is stopped by the friction resulting from pressure exerted by the rachet wheel against the slot wheel. It is well known that even when shafting and machinery are properly protected accidents still happen, generally through the carelessness of workmen, and it is also the fact that accidents due to shafting are almost invariably severe, partly because the mishap is not always noticed immediately it happens, and partly because it is difficult to stop the motion quickly enough. Anything tending to protect those employed in a factory where machinery is used certainly deserves attention, and we think the apparatus here mentioned will be of interest to many of our readers. Several exhibits serve to indicate the intimate association between mechanical and electrical engineering. For instance, Messrs. Crossley Bros. show a generating set, consisting of a 12 brake horse-power gas-engine combined with a Lancashire dynamo of 7-kilowatt capacity. The engine is of a recent type specially designed for electric lighting plants, and it includes several more or less novel features. An anti-fluctuator is fitted to the gas bag from which the engine draws its supply, so that any variation in pressure will not affect the proper proportions of gas and air in the cylinder; the governor can be regulated at will without stopping the engine; duplicate igniters are applied so that in the event of one tube breaking the light will not go down; and the engine is so designed that an absolutely steady light may be ensured without fly-wheeling the dynamo. Again, the Sunderland Forge Co. exhibit a portable electric circular saw bench, a very handy tool for timber merchants, builders, and others, possessing as it does the advantage of working under conditions where an ordinary saw could not be driven. The machine is mounted on wheels, and a novel feature is the introduction of a turntable on the framing, so that the top part of the machine may be swung round to any desired angle without shifting the base. By this means a cross cut can be taken in places where want of room would prevent long pieces of timber from being handled. The electric motor actuating the saw is of the multipolar continuous current enclosed type, and is hung on the underside of the table, so as to be quite out of the way. This is really a combined exhibit, as the benches themselves are made by Messrs. McDowall & Sons, of Johnstone, while the motors are made by the Sunderland firm. A further application of electrical machinery is to be found in the combined exhibit of Messrs. Ernest Scott & Mountain and the Ingersoll-Sergeant Drill Co. Here we find a Scott & Mountain multipolar motor driving an air-compressor capable of compressing 134 cubic ft. of air per minute to 100 lbs. pressure per square inch. Ingersoll-Sergeant rock drills are shown on a separate stand. A large assortment of pneumatic tools of various kinds is to be found on the space allotted to the Consolidated Pneumatic Tool Co. The appliances shown are tolerably familiar in the present day, and include caulking, riveting, chipping, and stone-carving hammers, as well as drills and tube expanders. The adjoining stand is occupied by Messrs. E. G. Herbert, of Manchester, who exhibit an ingenious automatic cutting-up machine for iron bars or pipes, and dealing with any length, shape, or size up to 4 in. Various other tools are exhibited on this stand, and also a Fletcher's exhaust head for preventing the ejection of oil and water from engine exhaust pipes, as well as for reducing the noise. A good many types of this form of appliance are now on the market, and considering the protection they afford to the roofs of buildings it is somewhat surprising to find that their use is not yet universal. Messrs. Isaac Storey & Sons, of Manchester, exhibit one of their twin air-pumps for condensing plant, the pumps being direct-driven by an inverted compound type steam-engine, the whole forming a very compact and self-contained arrangement. The London Scaling Co. have a collection of exhibits intended to illustrate different methods of cleaning steam boilers. The various tools are shown, and some samples of scale treated by the company in the course of business. Some types of brick bridges for boiler furnaces are also on exhibit, among which is one patented by Mr. Silley, and made by Messrs. James Dougall & Sons, of Bonnybridge. This stand is worthy of notice, as the cleaning of boiler and the scientific construction of bridges are matters that do not always receive sufficient attention, even by engineers. Messrs. John Hudson & Co. show their manganesite paste for steam, water, gas-joints, and manholes, this composition having been supplied to many governments, railways, and engineering firms throughout the world. A number of exhibits exemplifying the manifold uses of roller bearings are to be seen on the stand of the Empire Roller Bearings Company, which deserves the attention of visitors interested in bearings for shafting and machinery generally. A very compact oil gas-producer is exhibited by Messrs. Mansfield & Sons, of Chester. This producer is suitable for the manufacture of gas from oils, tallow, fat, or grease of almost any kind. The gas so produced has been pronounced by Professor W. Robinson to be

§ Penfold Gold Medal.

excellent for driving gas engines, as well as for heating and lighting. A generator of this kind is an extremely useful apparatus in country houses, as it may be applied in cooking and other domestic operations, and for driving pumps or electric light plant through the medium of a gas motor. Mr. Sam Deards, of Harlow, has a stand wherein his self-locking system of glass roofing is exemplified, another system of glazing being shown by Mr. Deacon, of Northampton, in a conservatory fitted with Deacon's lead glazing. Mr. Gooding, of Holloway, exhibits his interchangeable rubber stair tread, which consists of a metallic keeper pierced with square holes through which blocks of india-rubber are placed. The blocks project above the metal and form the wearing surface. One advantage of this system is that any one of the rubber blocks can be replaced in a few minutes when worn out, and so the whole of the treads may be kept in a constant state of efficient repair. There are several fine specimens of gates of various forms, exhibited by the Bostwick Gate and Shutter Co., and examples of collapsible and wrought-iron gates by Messrs. Worral & Co., of Liverpool. The last-mentioned exhibit also includes portions of gates, railings, and hammered work made to the designs of several well-known architects. A space occupied by Mr. H. C. Slingsby, of London, contains a large selection of trucks of most varied types, and for many different purposes. Truck design has been raised almost to the level of a fine art by the fertile brain of this exhibitor. The bewildering multiplicity of special purposes to which the trucks are suited may be gathered from the statement by Mr. Slingsby that he keeps a thousand different varieties of trucks in his London show rooms. In concluding this notice, we may mention the exhibit of the Silicate of Limestone Co., of Westminster. Several samples of artificial stone are here shown, and they appear to possess excellent qualities, so far as may be judged from superficial inspection. This material is said to be "a true silicate of lime building stone," whatever that may mean. It is claimed for the stone that it is not a concrete cast in moulds, but a chemically combined stone, resisting city atmospheres and frost better than natural building stone, besides being cheaper. Practically no information as to the material is available for curious visitors, who are left to draw what conclusions they may from inspection of the samples on view.

COMPETITIONS.

CONGREGATIONAL CHURCH, HITHER GREEN.—The design submitted by Messrs. W. D. Church & Son, architects, of 12, South-place, Finsbury, in a limited competition, for this church, has been selected by the assessor, and adopted for execution by the committee.

BATHS, CAPE TOWN.—Eight sets of designs were submitted in competition for the City of Cape Town Public Baths, to be erected in Caledon-square. The assessor was Mr. F. R. Roberts, architect, Durban, and the successful architects are Messrs. MacGillivray & Grant, Cape Town, 1; Messrs. Sherwood, Pitts, & Holland, 2; and Mr. A. Wyatt Papworth, A.R.I.B.A., 3. The scheme comprises large swimming-baths, first and second class; ladies' and gentlemen's slipper-baths, first and second class; Turkish baths for ladies and gentlemen; and the usual laundry and other accessories of such an institution.

PUBLIC LIBRARY, FENTON.—For this building eighty-nine sets of designs were submitted, and the assessor, Mr. Ernest George, F.R.I.B.A., has awarded the premiums as follows:—First (60*l.*), Messrs. Short & Penty, of 11, Anley-road, West Kensington Park, London; second (30*l.*), Mr. J. Stephenson Stout, of Whitehaven. The cost of the building was limited to 4,250*l.*

INFECTIOUS DISEASES HOSPITAL, CHELMSFORD.—The first premiated design in this competition was that sent in by Messrs. Pye & Bacon, 16, John-street, Bedford-row, W.C.; and the second was by Mr. J. Hugh Goodman, Town Hall-chambers, Reading.

BOOKS RECEIVED.

POTTERY: a Handbook of Practical Pottery for All Teachers and Students. By Richard Lunn. (Chapman & Hall.)

ARCHÆOLOGICAL SOCIETIES.

ROYAL ARCHÆOLOGICAL INSTITUTE.—A general meeting of this Institute was held on Wednesday, May 6, Sir Henry H. Howorth, President, in the chair. Mr. R. E. Goolden, F.S.A., exhibited a bronze spear-head with gold rivets found in the Thames near Marlow. Mr. E. Towry Whyte, F.S.A., read some notes on a certificate, kindly exhibited by Mr. M. H. Beaufoy, issued to Frederick Deninck, a merchant of London, as having visited the Holy Land. It is written on parchment and signed by two of the officials of the monastery of St. Catherine at Bethlehem, with the seal of the monastery attached. The date is 1688. Mr. H. Southam exhibited a small silver porringer, *temp.* late seventeenth century. Professor W. Boyd Dawkins, F.S.A., read a paper on the pre-Roman and Roman roads in south-eastern England. He described how the roads were for the most part confined to the higher ridges in pre-Roman times owing to the lower country being for the most part occupied by dense forest and morass, visited only in Neolithic and Bronze Ages by the hunter, and in prehistoric Iron age by the miners of iron. Under these conditions the population in prehistoric times was mainly centred in the North and South Downs, in which camps and tumuli abound, and in which tracks connecting one settlement with another, along lines of least resistance—sometimes on the crest of ridges and sometimes in the dry chalk valleys—give the beginning of the system of roads in this district. Professor Dawkins then traced the roads from Canterbury as the most important settlement in the district of the North Downs of clearly ascertained prehistoric Iron age. When the Romans conquered this part of the country they found the existing roads so well adapted to their purpose that the only straight road which they found it necessary to make in this district was the Stanes-street.—Mr. Talfourd Ely, F.S.A., contributed a paper on "A Roman Lighthouse." He prefaced his remarks by quoting evidence, both literary and from coins, to show that lighthouses existed in Roman times. He also described the Roman Pharos at Dover and at other places on the English coast. The Tower of Garreg, near Holywell, in North Wales, which is described by Pennant in his history of the parishes of Whiteford and Holywell, has been further investigated by Mr. Ely, and to prove that this is also a Roman Pharos he devoted the remainder of his paper. Although parts of the walls are modern, there is much which Mr. Ely considered as original. The building stands on the summit of Garreg Hill, and commands a splendid view over the estuary of the Dee. The general appearance is that of a Martello Tower; but the work is composed entirely of stone bedded in mortar. The only traces of openings appear to be on the northern side facing the Dee, and these consist of a blocked door with two windows above, and on a third stage three more windows. Although the tower may have been used in later times as a windmill or for other purposes, as has been suggested, Mr. Ely held that this example was a rare case of the survival of a genuine lighthouse dating from the Roman occupation of Britain. Discussions followed the above exhibits and papers, in which the President, Mr. W. H. Bell, Mr. Rice, Judge Baylis, Mr. Wilson, and Mr. Peers took part.

THE LONDON COUNTY COUNCIL.

THE usual weekly meeting of the London County Council was held on Tuesday in the County Hall, Spring-gardens, Lord Monkswell, Chairman, presiding.

Loans.—On the recommendation of the Finance Committee it was agreed to lend Camberwell Borough Council 13,774*l.* for paving works; West London School District Managers, 6,000*l.* for erection of schoolrooms; and Hackney Borough Council, 20,570*l.* for electric lighting and other purposes.

Tube Railway Amalgamation.—On the adjourned Report of the Parliamentary Committee dealing with the Underground Tube Railways, Mr. Sidney Low pointed out that the result of the various amalgamations would create a complete monopoly over the tube railways of London. The position was serious, and the Council ought to pay close attention to it. At the proper time he trusted the Council's representatives would move in Parliament to get the postponement of the Bills until after the Royal Commission on London Locomotion had reported. If the Bills were carried the railways would be controlled by a company with its head offices in America.

Mr. W. H. Dickinson said if the Bills were carried it would mean the amalgamation of 103 miles of railway, and the total capital would be 35,000,000*l.* The most important thing was to get the rates and charges of the various amalgamated railways revised in the light of the amalgamation.

The subject then dropped.

Vauxhall Bridge.—The adjourned Report of the Bridges Committee was submitted dealing with the new Vauxhall Bridge. The Report was given in our last issue, p. 515. The Committee recommended:—

"(*a*) That the resolution of the Council in so far only as it directs that the new Vauxhall Bridge shall be an elliptical arch structure be rescinded.

(*b*) That the design submitted, showing a steel segmental arch structure and the proposed architectural and artistic treatment of the same, be adopted, with the exception of the pylons.

(*c*) That the supplemental estimate of 22,690*l.*, submitted by the Finance Committee, be approved, and that the Bridges Committee be authorised to incur such additional expenditure in connexion with the construction of the new Vauxhall Bridge."

Mr. Beachcroft asked if a new contract was to be entered into with Messrs. Pethick for the superstructure of the bridge.

Mr. Sears, Chairman of the Bridges Committee, said the contract would be an entirely new one. The work would be put out to tender in the ordinary way.

Recommendation (*a*) having been agreed to,

Mr. F. W. Verney said he wished to refer back recommendation *b*, as he wished the Committee to report further on the pylons, the balustrade, and the piers. The design before them was a great improvement on designs which had been before the Council on former occasions and there was a great deal about it which made it worthy of such an important structure as a bridge over the Thames. But there was much feeling in the Council that the height of the pylons was out of proportion with other parts of the structure, and he thought that the bridge would be improved if a good deal of the pylons was removed, and if they were shortened and put at both ends of the bridge. He did not propose to remove the pylons altogether. As to the balustrade, he thought it was a great blot on the whole of the design. It was a clumsy piece of work and was not worthy of the rest, and he hoped that that part of the design would be reconstructed. As to the piers, he believed that those who were most acquainted with the finest specimens of bridge construction on the Continent would say that a long line, from one end to the other without any break, such as the design for the bridge showed, was lacking in imagination and effect. He suggested that the piers should be carried up so as to break the line of the balustrade and so as to get a better architectural effect. The piers were poor and flat and low and he ventured to show a design which had been prepared which showed how the piers might be carried up. The construction of a bridge over the Thames was an opportunity for beautifying London, and the beautifying of London was part of the betterment of London. They could not have poor architectural designs, they could not do things shabbily, without inflicting upon London ugliness which would exist from generation to generation.

Mr. A. Smith seconded the amendment.

Mr. Beachcroft asked how it was that the Architect of the Council differed from the Committee as to the pylons? He (the speaker) objected to them on the ground of economy.

Mr. Sears said that Mr. Verney's amendment would have the effect of shelving the whole question, and that would be a serious matter, for it was greatly desired to get on with the work without delay. There had been a great deal of criticism in regard to previous designs for this bridge, but there was practically a concensus of opinion in favour of the present design. He held in his hand a letter written on behalf of a society which included such names as Sir E. J. Poynter, Sir W. Richmond, Sir Benjamin Baker, and Messrs. Thomas Brock, G. Frampton, Aston Webb, J. Belcher, H. H. Statham, and others, and the last part of that letter was very important. The letter was only a matter of criticism of detail, and in referring to a detail underneath the balustrade, the Architectural Vigilance Committee said: "We especially call attention to this as we feel that, if the

feature is not altered it will go far to spoil what will otherwise be a very pleasing and satisfactory piece of steel bridge construction." That was a remarkable testimony and it showed that after all their difficulties the Council had a very satisfactory design, and one which was likely to commend itself to the people of London and be a credit to their officers, the Council, and the Metropolis. They might think it desirable to further consider some matters of detail, but he urged the Council not to delay the matter.

The amendment having been defeated,

Mr. Strauss moved to omit the words "with the exception of the pylons," and to insert the words "and that the question of the pylons stand over for further report of the Committee." The word "pylon" meant, according to the dictionary, "a monumental structure constituting an entrance to a temple or other large edifice." A bridge, if not an edifice in the ordinary sense of the word, was a building of a character which required something to show the entrance. In connexion with the Alexandre III. Bridge over the Seine, which was one of the finest bridge designs, there were beautiful pylons — not clumsy-looking ones. Another very beautiful bridge was the one at Stuttgart—a steel bridge, though it was at first proposed to erect a masonry bridge—and there also were pylons on each side of the bridge. Not only did their architect desire to retain the pylons, but Mr. Norman Shaw was decidedly in favour of placing pylons at the entrance of the bridge. If the pylons shown on the design hanging on the wall were covered, the effect of the design would be spoilt —the architectural effect was destroyed [the pylons were here covered by strips of paper, and there were several cries of "It is improved!" "It is much better!"] Presumably there were artistic members of the Council who objected to pylons altogether. There was no reason why the matter should not be referred back, so that the Committee should have models prepared showing the treatment of each end of the bridge.

Captain Sheffield seconded the amendment.

Mr. Walter Emden supported. He said the proper place for these pylons would be at the entrance of some big temple, with a flight of steps leading up to a great trophy at the top. The big towers shown on the design would cost a lot of money, and would destroy the proportions of the bridge; but if the entrance were treated as in the Alexandre III. Bridge in Paris, the bridge would be one of the handsomest in London. All that was wanted to perfect the design for Vauxhall Bridge was to provide a base at the entrance for a group of statuary.

Mr. Burns, M.P., said it was important that the Council should put itself in harmony with the artists, architects, and also the engineers of London, and the Council had done all they reasonably could to ensure that end. He thought it would be unwise to omit the pylons, and he suggested that they should approve and pass the design, but give the Bridges Committee power not to carry the foundations for the pylons higher than the parapet of the arch, so that if they decided against the pylons ultimately the foundations could be used as a base for a group of statuary, as suggested by Mr. Emden. A model of one of the pylons might be put up in plaster, at the cost of a few pounds, and it would then be easier to tell whether those features of the design were suitable.

Mr. Sears supported Mr. Burns's proposal. They could approve of the general design of the bridge and let the question of the pylons stand over.

The amendment and recommendations were then agreed to.

Port of London Commission.—Mr. Gilbert, Chairman of the Rivers Committee, introduced a long report on the Port of London Bill. The Committee recommended in the first place that the municipal element should be strengthened on the proposed Port Commission, the County Council to have fifteen members out of the forty proposed. The Committee further proposed that the Council should contribute 2,200,000*l.* as its share of the estimated sum of 2,500,000*l.* required for the deepening and improvement of the river, the remaining 300,000*l.* to be contributed by the City Corporation.

After a long discussion, the Council adopted the foregoing recommendations, as well as others put forward by the Committee.

Southern High-level Sewer Extension.—The Main Drainage Committee recommended, and it was agreed—

"(*a*) That the estimate of 7,220*l.* submitted by the Finance Committee in respect of the construction of a relief sewer from the southern high level sewer in Balham High-road to Mayford-road, be approved.

(*b*) That expenditure on the work be sanctioned to the amount of 5,940*l.*; that the sewer and other incidental work be carried out by the Council without the intervention of a contractor; and that the drawings, specification, and estimate of 5,940*l.* be accordingly referred to the Works Committee for that purpose."

Indication of Houses of Historical Interest in London.—The Historical Records and Buildings Committee reported as follows:—

"The Council on December 17, 1901, decided to undertake the work of indicating, by means of memorial tablets, houses of historical interest in London, and referred it to us to make the necessary arrangements for the execution of the work. We have accordingly prepared a list of houses which we consider worthy of commemoration, and we suggest that, as a commencement of the work, tablets should be affixed to three of these—viz., 1. No. 122, Great Portland-street, Oxford-street, the house in which James Boswell, the biographer of Samuel Johnson died; 2. No. 67, Wimpole-street, a residence of Henry Hallam, the historian; and 3. No. 48, Doughty-street, Mecklenburgh-square, a residence of Charles Dickens, the novelist. It should be mentioned that the houses have not been selected as being necessarily in our opinion those which require indication beyond all others. We propose to submit to the Council, in due course, further lists, which will together form a fairly representative selection. In all of the above cases we have carefully verified the facts connected with the houses in question, and we have also in each case obtained the necessary consents of the ground landlords and the lessees to the erection of memorial tablets. The design of the tablet which is proposed to be used has been prepared by the superintending architect. . . . It is proposed that, except as regards design, the tablets should be similar to those previously used by the Society of Arts, viz., encaustic tablets, 19 in. in diameter, with plain lettering in white upon coloured ground suitable to the buildings upon which they are to be placed."

A recommendation to the above effect was agreed to.

Clifford's Inn.—The same Committee, referring to the sale of Clifford's Inn, reported as follows:—

"The site will no doubt be used for building purposes, and we are of opinion that it is a matter of deep regret that the historic buildings comprising the inn, and especially the hall, should be thus demolished. We are not however prepared, owing to the great cost involved, to recommend the purchase of the property by the Council. For the purposes of record we have given instructions for photographs of the buildings to be taken and drawings made of objects of interest in connexion with the inn. It may be mentioned that the oak panelling, &c., in one of the rooms is expressly excluded from the sale by auction, and the vendors reserve to themselves the right to sell and remove it."

Housing.—The Housing of the Working Classes Committee reported as follows:—

"We have to report that Sandwich-buildings, Swan-lane estate, Rotherhithe, are now ready for occupation. The buildings have been erected to provide rehousing accommodation for persons to be displaced by the construction of the Rotherhithe Tunnel. They contain twenty tenements of two rooms and twenty tenements of three rooms, affording accommodation for 200 persons."

Trees, Holborn to Strand.—The Improvements Committee submitted the following report:—

"For some time past we have had under consideration the question of the most suitable kind of tree for planting in Kingsway, Aldwych, and the widened portion of the Strand, and we have been in communication with the Parks and Open Spaces Committee on the subject, as we were desirous of arranging for some suitable species of trees, other than the frequently-used plane tree. The Parks Committee thought that plane trees were the most suitable for the purpose, but having very carefully considered the subject and consulted the Westminster City Council, upon whom the maintenance of the thoroughfare and the trees therein will eventually devolve, we have decided that in the widened Strand, where some plane trees have already been planted, only plane trees shall be used; that plane trees and acacias shall be planted alternately in Aldwych, and plane trees and ailantus trees shall be planted alternately in Kingsway. We have also arranged with the Westminster City Council that the trees shall be in our charge until their growth is assured, that is to say, for a period not exceeding three years after the streets in question have been handed over to the City Council."

Theatres.—On the recommendation of the Theatres and Music Halls Committee, the following proposals were agreed to:—

A side show at the London Exhibitions, Earl's Court, known as the Martinique side show (Mr. A. O. Collard).

A side show in the Western Gardens of the London Exhibitions, Earl's Court, to be known as the "Musical Ride" (Mr. A. O. Collard).

A side show at the London Exhibitions, Earl's Court, to be known as the Spider's Web (Mr. A. O. Collard).

Alterations which it is proposed to make at the Vaudeville Theatre, Strand (Mr. J. G. W. Buckle for Messrs. A. and S. Gatti).

Sewage Disposal, Epileptic Colony, Horton.—The Asylums Committee recommended, and it was agreed—

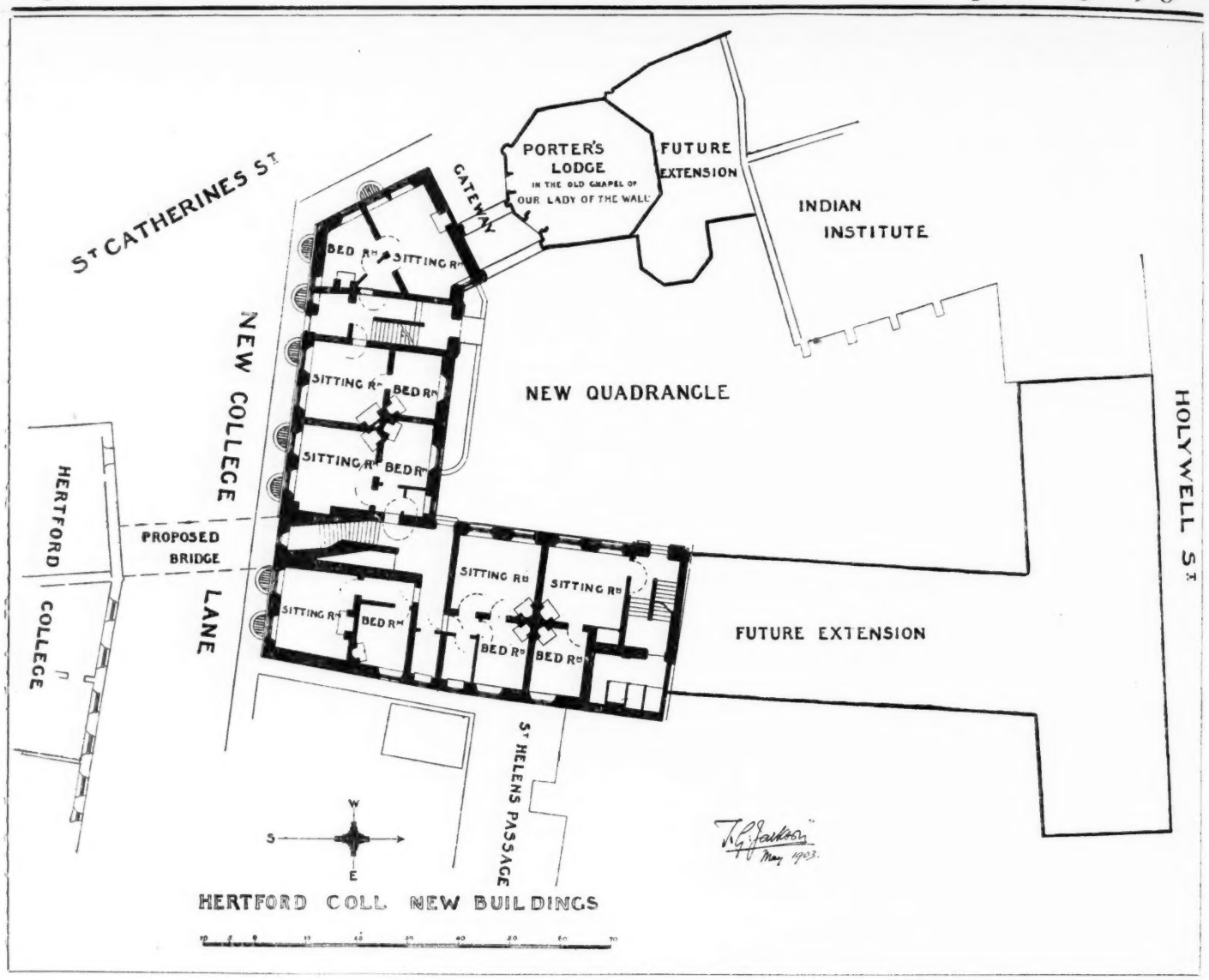
"That the Council do sanction the payment to the Epsom Urban District Council of a sum of 1,250*l.*, being a contribution towards the cost of providing pumping apparatus on the Epsom Urban District Council's sewage farm, in order that the sewage delivered thereon from the epileptic colony may be suitably dealt with on such farm."

Proposed New Asylum.—The same Committee reported that on March 24 last the Council authorised the Committee to proceed with the erection of a replica of the Horton Asylum on the Horton estate, and on March 31 approved the estimate submitted by the Finance Committee, amounting to 97,210*l.*, for the following works in connexion with the erection of such asylum, viz., foundations, roads, architect's and quantity surveyor's fees, additions to the central station for the supply of electric current and the sinking of a well. The Council, however, reduced the provision in the estimate for the architect and quantity surveyors from 13,000*l.* to 10,000*l.*, being of opinion that the fee proposed to be paid to the architect, Mr. Hine, should not exceed 7,000*l.* Mr. Hine has now written refusing the offer, as he regards his original charge as moderate, and is supported in this view by the President of the Royal Institute of British Architects, to whom he had referred the matter. He claims that he received 6,500*l.* for the Horton Asylum, which was altogether inadequate. He explains in his letter that he cannot regard the Council's actions as due to feelings personal to himself, but that it was either intended as an attack on professional charges or that it arose from a misconception of the facts of the case. In the former event he adds, "I feel it a duty to my profession to resist it, and this consideration has influenced me as much as other more personal ones in declining your committee's offer."

In face of the very firm statement of Mr. Hine, the Committee reiterate that they think 10,000*l.* is a reasonable fee. They add: "It may not have been appreciated that on account of the variation of levels it will be necessary to remodel to some extent a number of the working drawings, and that the whole of them will have to be redrawn in order to obtain the several sets required for the proper execution of the work. We think that for a repetition of the Horton Asylum Mr. Hine should be the architect. If he is not appointed it will be necessary to obtain fresh designs from some other architect, which would involve many months' delay and in all probability entail much additional cost. We are, therefore, constrained to ask the Council to reconsider its decision in reducing the proposed fee to Mr. Hine."

Mr. Hubbard, Chairman of the Committee, briefly moved to this effect, but the consideration of the matter had to be deferred, as the Council was then, at 8.30 p.m., counted out.

WESLEY HALL, WIGAN.—A new Wesley Hall has just been opened at Wigan. The new building, intended to be used for Sunday-school work, is carried out in Yorkshire stone, and is of Gothic design. It has an elevation to Dicconson-street and Standishgate. The lecture hall is capable of seating about 450; it has an open Gothic roof and large Perpendicular tracery windows at each end glazed with leaded lights, by Messrs. T. Smith & Son, Manchester. The whole of the building is heated with hot water, low pressure system, by Messrs. Saunders & Taylor, Manchester. The building contract has been in the hands of Messrs. J. Johnson & Son, Wigan. In the church a new organ has been placed, built by Messrs. Conacher & Son, Huddersfield. The church has also been re-decorated by Mr. R. Banister, Poolstock, Wigan, and fitted with electric light, along with the new portion, by Mr. J. Barton, Blackburn. The work has been carried out from designs by, and under the superintendence of, Messrs. J. B. & W. Thornley, architects, Wigan, Darwen, and Blackpool.



Illustrations.

THE LATEST EDITION OF VAUXHALL BRIDGE.

WE give this week a perspective view of the design for Vauxhall Bridge as now proposed, and elevations of the design as proposed some months ago and as now proposed. The difference is certainly most striking, and shows what may be the effect of strong public criticism on work of this kind. It is true that the Bridges Committee, when they found what an outcry the first design raised among artists, professed that they had never intended to carry out that design, and that it was only made to show the general lines of construction, &c. We fear we are not simple-minded enough to accept this explanation. The first design, with its immense coarse spandrel ornament, is at all events what their engineer would have carried out; and when we made a visit to the County Council Offices to see the design, a superior official who was deputed to show it to us said, as we entered the room—"There it is; and a beautiful bridge it is"; and we have no doubt that this gentleman was only repeating what he had heard as the general impression in the Council.

Any architect who saw the present proposed treatment of the balustrade and of the spandrels of the girders would of course at once see that this work never came out of the County Council workshop. The Council have been repeatedly advised that they ought to put the design of the architectural portion of a bridge into the hands of an eminent architect; it appears that they obstinately refuse to do this formally, but that they are willing to seek the advice of an eminent architect informally and *sub rosâ*, as it were, and then put it forth as their own architect's work, as they certainly did in the first-instance. This does not seem a very handsome way of acting; and one is glad to find that, on second thoughts, the Bridges Committee seemed to consider it right to admit Mr. Norman Shaw's assistance. Possibly the real object was to try to catch their critics, who of course are believed to be only inspired by a desire to find fault, and after the malevolent critic had pulled the design to pieces, to turn round and convict him of having criticised the work of an eminent architect. However, the result ought to satisfy the Bridges Committee that they were wrong before, and that those who objected so strongly to their first design can recognise a good thing when they see it.

We do not think, however, that Mr. Norman Shaw had anything to do with the method of filling up the spaces between the cantilevers with steel plating, so as to make it look like a tank. If he had, we should think his judgment at fault in that case; but we suspect that this is a piece of the engineer's detail. It is a mistake, and we think all our readers will agree that it will spoil the design if carried out. It gives a heavy and clumsy appearance to that portion of the design, which is quite at variance with the character of the rest of the steelwork, and it is in fact a sham; and unless this is altered, an otherwise good piece of work will be spoiled.

We do not particularly admire the pylons; and if carried out, they should be smaller and more simple in form, and might certainly very well be improved in architectural design and treatment.

NEW BUILDINGS, HERTFORD COLLEGE, OXFORD.

THE new buildings for Hertford, now being built from Mr. Jackson's design, are on the north side of New College-lane, which divides them from the rest of the college. It is proposed to connect the two parts by a bridge across the street and by a subway under it.

The block now in progress contains three staircases and twenty-four sets of rooms for fellows and students. In the basement are bathrooms and cellarage.

Future extension is provided for, to Holywell-street northwards, where the college has acquired a frontage, and up to the Indian Institute on the west side. The latter extension will include the repair and exposure of the interesting octagonal chapel of Our Lady at the Wall, which, though sadly mutilated and cut up into offices and shops, retains, besides the beautiful little doorway well known to Oxonians, traces of the original windows and other features, which have been, till the present works revealed them, buried in adjacent buildings.

The contractors are Messrs. Benfield & Loxley, of Oxford, and the clerk of works is Mr. E. Long.

GATEWAY, NOTTINGHAM CASTLE.

THE old gateway of Nottingham Castle, now the town museum, consists of the lower part only of the original structure. Part of it is a mere shell, and part of it has served as an estate office for the Duke of Newcastle.

The outside masonry is much decayed, and has been patched with brickwork, which is now falling off the wall, together with part of the old ashlar facing.

The drawing shows Mr. Jackson's scheme for repairing and strengthening the remains and converting them into rooms for museum purposes.

APPLICATIONS UNDER THE 1894 BUILDING ACT.

THE London County Council at their meeting on Tuesday dealt with the following applications under the London Building Act, 1894. The names of applicants are given between parentheses:—

Kensington, South.—That the resolution of the Council of March 17, in regard to the retention of two studios at the rear of Nos. 17 and 18, Pembroke-square, Kensington, be rescinded, and that the solicitor do take the necessary proceedings to obtain the demolition of the portion of the buildings which has been erected, if it has not already been removed.—Agreed.

Lines of Frontage and Projections.

Fulham.—Buildings on the east side of Gliddon-road, Fulham, between No. 25 and Gunterstone-road (Mr. W. Cave for Messrs. Squire & Potter).—Consent.

Lewisham.†—A two-story porch additionto a block of residential flats on the north side of Sydenham Park, Lewisham, eastward of Sydenham Park-road (Mr. H. G. Leslie).—Consent.

Westminster.—Deviation from the plan approved on July 29, 1902, for the erection of one-story shops

and entrance porches in front of Nos. 147, 149, and 151, Victoria-street, Westminster, so far as relates to the erection of a party-wall, with projecting pilaster and plinth, between Nos. 149 and 151 (Messrs. Z. King & Son).—Consent.

Clapham.—An extension of the periods within which the erection of buildings on the south side of Clapham-park-road, Clapham, to abut upon Park Hill, was required to be commenced and completed, be granted.—Consent.

Dulwich.—A wood and tile hood over the entrance to No. 270, Lordship-lane, Dulwich (Mr. A. E. Kent).—Consent.

Greenwich.—Bay windows at the first and second floor levels of a building upon the site of Nos. 18 and 20, The Vale, Blackheath (Messrs. J. D. Mathews & Son for Mr. H. Burnside).—Consent.

Lewisham.—One-story shops upon the forecourts of Nos. 315 and 315A, Brockley-road, Lewisham (Messrs. Norfolk & Prior for Mr. C. C. Story).—Consent.

Limehouse.—One-story shops to Nos. 654 and 656, Commercial-road, Limehouse (Mr. A. T. Bolton for Mr. R. George).—Consent.

Paddington, South.—Retention of a projecting balcony at the second-floor level of No. 18, Hyde Park-place, Paddington (Mr. E. K Purchase).—Consent.

Dulwich.—An addition to Christ Church (Presbyterian Church), East Dulwich-grove, Dulwich, to abut upon Townley-road and Calton-road (Mr. C. E. Barry for the Rev. J. R. Patterson).—Consent.

Hammersmith.—The retention of a projecting illuminated sign at the Red Cow public-house, Hammersmith-road, Hammersmith (Messrs. Bull & Bull for Mr. W. Brown).—Consent.

Strand.—A projecting clock at No. 126, Regent-street, St. James's, Westminster (Mr. H. F. Tomalin for Dr. Jaeger's Sanitary Woollen System Co., Ltd.).—Refused.

Marylebone, East.—A glass and iron shelter in front of a porch at No. 22, Portland-place, St. Marylebone, to abut upon Duchess-street (Mr. C. Brooks for Mr. T. McKenna).—Refused.

Strand.—Retention for a further period of the three wood and glass showcases erected in front of No. 1, Piccadilly-circus, St. James's, Westminster (Mr. A. Oldcorn).—Refused.

Width of Way.

Westminster.—A building at the rear of Nos. 106, 108, and 110, Brompton-road, to abut upon Cottage-place (Messrs. Blangy & Van Baars for Messrs. Spiking).—Consent.

Hammersmith.—Infirmary and workhouse buildings on the north side of Ducane-road, Wormwood-scrubbs, Hammersmith (Mr. J. Lamb for the Hammersmith Board of Guardians).—Consent.

Fulham.—A coach-house on the eastern side of Argon-mews, Fulham-road, Walham Green (Mr. T. J. Evans for Mr. T Davies).—Consent.

Width of Way and Line of Frontage.

Strand.—The retention of two show-cases in front of No. 6, Shaftesbury-avenue, Piccadilly, abutting upon Great Windmill-street (Mr. J. B. Pinchbeck for Mr. G. A. Milward).—Refused.

Lines of Frontage and Construction of Buildings.

Rotherhithe.—A bridge to connect Messrs. A. & P. Keen's premises on the north and south sides of Bermondsey-wall, Rotherhithe (Messrs. Gelder & Son for Messrs. A. P. Keen).—Consent.

Space at Rear.

Lewisham.—A modification of the provisions of Section 41 of the Act with regard to open spaces about buildings, so far as relates to the proposed erection of a two-story building on the east side of Shell-road, Lewisham, northward of No. 3 (Messrs. Hodson & Whitehead for Messrs. Hodson Brothers).—Consent.

Deviation from Certified Plans.

Islington, East.—Certain deviations from the plans certified by the District Surveyor so far as relates to the proposed rebuilding of the Hen and Chickens public-house and Nos. 128 and 130, Canonbury-road, Islington (Mr. W. A. Aickman for Mr. L. Taylor).—Consent.

Formation of Streets and Line of Frontage.

Norwood.—That an order be issued to Messrs F. & W. Stocker sanctioning the formation or laying out of three new streets for carriage traffic to lead from Herne Hill to Elmwood-road, Dulwich, and in connexion therewith the widening of a portion of Herne Hill and the erection of buildings to an advanced line of frontage (for Mr. H. G. Smallman).—Consent.

Formation of Streets.

Hammersmith.—That an order be issued to Mr. E. K. Purchase refusing to sanction the formation or laying out of a new street for carriage traffic to lead out of the east side of Standish-road, King-street, Hammersmith.—Agreed.

Means of Escape at Top of High Buildings.

Holborn.—Certain deviations from the drawing approved on March 28, 1899, in respect of the means of escape in case of fire proposed to be provided on the sixth floor of a block of buildings (known as Oxford Mansions) on the south side of New Oxford-street, Holborn, at the corner of Bloomsbury-street, on the site of Bedford Chapel (Mr. G. D. Martin for Mr. J. Carmichael).—Consent.

Cubical Extent.

Hackney, North.—Three additional stories to, and an extension of the basement of, No. 24, Shackle-well-lane, Hackney, which premises, with additional premises eastward, would together exceed in extent 250,000 but not 450,000 cubic ft. (Mr. J. R. Vining for Messrs. Lloyd, Attree, & Smith).—Refused.

*** *The recommendation marked † is contrary to the views of the Local Authority.*

TRADE CATALOGUES.

THE Glengarnock Iron and Steel Co., of Ardeer and Glengarnock, send us their handbook of steel sections, a clearly printed and well-arranged volume of sufficient size to be convenient for office use. This firm manufactures steel by the Siemens acid open hearth, Bessemer-acid, Siemens basic, and Bessemer basic processes, and the material is guaranteed to stand tensile strain of from 26 tons to 30 tons, 27 tons to 31 tons, and 28 tons to 32 tons per square inch, with 20 per cent. elongation in a length of 8 in., these tests being accepted by the Admiralty and Lloyd's surveyors. In the case of structural steel the strength is from 28 tons to 32 tons per square inch, the tables of joists and girders being calculated on safe stresses of 5 tons and 7·5 tons per square inch, practically representing about one-sixth and one-quarter of the breaking loads. A simple rule is given in the preface for arriving at any other desired working stress to suit particular circumstances. It is not stated anywhere in the tables whether the safe loads are calculated on the assumption that the ends are fixed, or merely supported, but from one or two calculations we have made, the condition of non-fixity appears to form the basis of the loads. This is quite as it should be, although it is somewhat a disadvantage to the makers that the fact is not clearly stated, because they may not be credited with the adoption of the safer method of computation. The tables would be improved by the addition of the moments of resistance for the different sections, and as the least moments of inertia would be useful in many examples, these measurements should be placed side by side with the greatest moments already given. The pages devoted to angles, tees, and channels contain no data for the convenience of the user, beyond the bare dimensions, this being an omission that ought to be made good in the next edition of the book. Some tables of steel stanchions and columns are included, but without the least moments of inertia, or the radii of gyration. Even with the deficiencies mentioned, this handbook is vastly superior to most of the publications issued by firms concerned in the structural steel industry. In fact, there are at the present moment only three better section books in existnece. The recent adoption of standard dimensions will afford a very suitable opportunity for the Glengarnock Works to produce a thoroughly satisfying guide to their productions, and we hope to find that this firm, and others in Great Britain, do not intend that American steel-works shall be allowed to maintain their existing supremacy in technical literature of the kind.

Mr. W. A. Gibson, of London and Glasgow, sends us his catalogue of lifts, in which some twenty pages are devoted to various forms of hydraulic lifts, which may be thus classified :—(1) Low-pressure suspended types for passengers and goods, driven from mains where pressure exceeds 30 lbs., from an overhead tank, from enclosed tank on the hydro-pneumatic system, and from the Quimby pump ; (1A) low-pressure direct-acting platform type for goods ; (2) high-pressure suspended type for passengers and goods driven from company's mains or private installation, with and without variable power gear ; (2A) high-pressure direct-acting type. Very few details of the above lifts are given in the catalogue, but each type is excellently illustrated, so that a good general idea of the apparatus may be obtained. Electric-lift equipment, controlled by rope, by a switch in the car, and by push-button, is next described and illustrated, the last-mentioned method having the advantage that the services of an attendant may be dispensed with, while there are various conveniences and safeguards that will be appreciated by users. Thus, after the gates have been closed, the pushing of a button on any floor brings the lift to that level, and the safeguard is that one journey must be completed before the lift will respond to another call ; no gate can be opened until the car is opposite the landing, and the car cannot be started before all the gates are closed. The remaining types of lifting machinery mentioned are belt-driven screw-gear lifts, hand-power goods, and dinner lifts, and the rest of the catalogue is occupied by matter descriptive of valves, accumulators, pumps, lift cars, and lift enclosures. The volume is printed and illustrated in admirable style, and as a summary of different forms of lifting appliances it will be found of service both to architects and to intending purchasers. A supplementary book, containing information of more detailed character and dimensions, such as are published by several lift makers, would probably be valued by architects, as it is extremely handy to have measurements at hand when preliminary plans for buildings are being prepared. To be obliged to write to the makers of specialities for dimensions which ought to be in a catalogue causes unnecessary delay, and frequently both correspondence and interviews, for which it is not always convenient to find time.

The British Accumulator Co., of Victoria-street, S.W., have sent us their catalogue of accumulators. These cells are for use in electric light and power stations, or for traction purposes. A clear description is given of the plates, and it will be seen from the diagrams that the method of construction ensures a large contact surface per unit quantity of lead. A guarantee is given with the batteries, and their maintenance is undertaken for periods up to ten years at an annual premium. Any of our readers who may be interested in accumulators should write for a copy of this catalogue.

Erith's Engineering Co. send us catalogue No. 142, descriptive of the "A.B.C." Fan System of heating and ventilation for large buildings. This is one variety of the plenum method of dealing with heating and ventilation, and the apparatus illustrated appears to be well-designed and well-made. Propellor or centrifugal fans are employed according to circumstances ; the heaters are invariably built up in sections, and the method of air distribution provides for the admixture of cold air as necessary for the proper regulation of temperature. This catalogue refers chiefly to factory and warehouse buildings.

The Lift Fireplace Co. (Manchester) send us a pamphlet describing and illustrating their "Liftable" firegrate, which can be left at a level with the hearth for slow combustion, or raised by a pulley arrangement for quick combustion. The principle is not new, but there is something new, we believe, in the working and the arrangement by which a blower is brought down to the grate as it is raised. It seems a very good fireplace, and worth the attention of architects.

Messrs. Joseph Cliff & Sons (Wortley, Leeds) send us an excellently got up illustrated catalogue of their porcelain sinks of every description, scullery sinks, slop sinks, hospital bed-pan sinks, *post mortem* and mortuary slabs, &c., all of the best make in glazed porcelain. The catalogue also includes sink fittings and Yorkshire brown stone-ware sinks.

Messrs. Cox Bros. & Co. (Maidenhead) send us their illustrated catalogue of plain strong timber fencing, open palisading, &c. for execution in oak or fir ; and field gates in oak, larch, or deal.

Messrs. Stephen & Carter send us their illustrated catalogue of builders' ladders, extension ladders, step ladders, trestles, builders' hand carts and barrows, garden and stable barrows, brickmakers' barrows, trollies, masons' trucks, &c.; also screens, sieves, drain-clearing fittings, and their improved expanding drain stopper.

Messrs. Croggon & Co., of London, Liverpool, and Glasgow, send us their new catalogue of iron roofs and buildings, in which the designs and illustrations are said to be taken from work actually carried out by the firm. Section 1. refers to iron and steel roofs and buildings, and here we find a number of sectional and dimensioned diagrams of self-supporting roofs, the cheapest form of such construction ; of principals for pitched and curved roofs, designed to utilise stock sections of the various bars required, and of principals

suitable for churches, mission rooms, and schools. Section 2 contains plans and perspectives of wood-framed buildings covered with galvanised corrugated sheets, the structures so illustrated being chiefly churches, mission rooms, portable houses, pavilions, and farm buildings.

Messrs. Beck & Co., of London, send us a copy of their general catalogue issued last month. This is a well-bound volume of 274 pages, containing a large amount of detailed information relating to water fittings, fire extinguishing apparatus, pumps and pump fittings, steam fittings, hot water boilers, and similar appliances. While the catalogue generally is a useful labour-saving device for the busy architect or estimating clerk, special interest attaches to the pages describing and illustrating the Imperial water meter, the ingenious apparatus patented by Mr. Schönheyder. The mechanism of this machine is as simple as it is beautiful; the meter is capable of registering the merest dribble; regulation is very rarely necessary; and the meter can be examined or cleaned without removal from the pipeline. This type of meter is also applicable for measuring hot feed water for steam boilers, the method of fixing under such conditions being clearly stated in the catalogue.

Erith's Engineering Co., of London, send us their catalogue describing the "A.B.C." Progressive Tunnel Dryer, specially adapted for drying bricks, tiles, and terra-cotta, but also suitable for the treatment of other materials. The drying system consists essentially in the application of air at a decreasing range of humidity and an increasing range of temperature. Bricks are piled on steel cars, and are then passed through drying chambers, or tunnels, in a continuous manner, while a constant volume of hot air is circulated in the reverse direction. Thus the fresh bricks encounter air that has absorbed a considerable amount of moisture and lost much of its original heat in drying the bricks previously passed. By this treatment the bricks are rapidly and economically dried without the development of cracks. As a general rule, steam is the best means of providing the necessary heat, and it is applied in a special form of air-heater, in connexion with which a fan is employed for the distribution of heated air through ducts in such a way that the user may have complete control at all seasons over the volume, temperature, humidity, and circulation. In some cases heat from the cooling kilns is utilised to produce the required temperature in the brick dryer. The gases leaving the kilns are first mixed with the requisite volume of cold air to reduce them to the proper temperature, and then distributed by means of a fan, as before. Illustrations are given of typical installations, fans, heaters, and the cars upon which material is stacked before passing through the drying chambers.

Correspondence.

FIRE PREVENTION EXHIBITION.

SIR,—In your notice of the International Fire Prevention Exhibition at Earl's Court you say that the iron strings and risers in a staircase we show would almost certainly fail in a severe fire. That is, of course, true enough if such stairs were fixed inside a building, but these are intended for outside use, where experience shows that they are safe from damage, even in very severe fires. Such was the case in the fire at Messrs. Tom Smith & Co.'s factory in Finsbury a few months ago.

The practice of having outside staircases to buildings is a very ancient one, and has been continued to the present day. The Bargello at Florence, Rouen Town Hall, Carlisle Castle, have examples; and in Somerset and Yorkshire, and elsewhere in England, they are common in old farm buildings and cottages.

However well provided a building may be in the materials of its construction to resist the action of fire, internal staircases and lifts are almost sure to act as funnels for smoke and hot air, rendering them useless for fire-escape purposes, but outside stairs made of iron, with access to each floor, are cheap and effective in providing against loss of life, and there are few cases in which their construction presents any insuperable difficulties.

The fireproof treads you also refer to are intended for use either inside or out with fireproof or other strings and risers, and are chiefly useful on account of their special non-slippery surface.

A. PYE-SMITH,
The St. Pancras Ironwork Co. Ltd.

TIMBER AND STONE RESOURCES OF MAINE, U.S.A.

MR. KEATING, British Vice-Consul at Portland, in the State of Maine, U.S.A., in the course of a lengthy Report on the trade and commerce of 1902 mentions that the preservation, development, and economical management of the timber lands has not only become a paramount issue with the people of Maine, but throughout the length and breadth of the country there is agitation in favour of the preservation of the timber lands. The authorities have made a superficial survey and exploration of the whole State. The results show that there are standing in the forests of Maine 21,239,000,000 ft. of spruce, besides large quantities of pine, cedar, hemlock, poplar, and various species of hardwoods. It is reported that the annual growth is sufficient to warrant the cutting of 637,000,000 ft. of spruce timber in the State each year without depleting the supply. In addition to the lands that are actually timber-producing at the present time, there are large areas, once used for agricultural purposes, that have been allowed to go back to woodlands. In many instances the growth is small and of little or no value for manufacturing purposes at present, but each year a certain percentage becomes available, and in the course of time a large amount of timber will be supplied from this source; in fact, it is estimated that there will be from 11,000,000 acres to 12,000,000 acres of lumber-producing land in the State. A great deal of the present lumber wealth is found in the forests of white birch of which upwards of 35,000,000 ft. are taken annually; white birch is used largely by the hardwood mills of the State, the greater portion in the manufacture of spools. The exportations of deals last year included 5,142 pieces to Bristol and 36,157 pieces to Glasgow. The shipments by the Dominion Line to Liverpool comprised the following: Deals, pieces 185,731, cars 301; boards, cars 275, pieces 185,731, feet 5,893, and packages 12,320; logs, 970 pieces; blocks, maple, &c., 52,403 pieces; staves, 900 bundles; chair stock, 5,227 packages. In its granite quarries Maine has an inexhaustible source of wealth. The granite in Island Falls is really syenite. Much of the granite in York County is syenite as is also part of the red granite of Washington County and Mount Desert Island. The capital invested in the granite industry amounts to 583,000*l.*; the value of the year's output was 533,800*l.*; the number of workmen employed is 3,502. Granite cutters are paid from 11s. 8d. to 13s. 4d. per diem; quarrymen, 7s. 3d. to 8s. 4d.; blacksmiths, 11s. 4d.; common labourers, 6s. to 7s. 3d.; and other labourers, including polishers, carpenters, &c., 7s. 3d. to 10s. Paving cutters work by the piece, receiving a fixed sum per 1,000 blocks; they generally make from 9s. 1d. to 10s. per diem. All granite cutters work eight hours per day. In some large plants the quarrymen now work only eight hours, but in most plants they work nine hours per day. In many plants the blacksmiths work but eight hours, while in the majority of cases they work nine hours. In several plants all classes of labourers work only eight hours, but apart from granite cutters the majority of labourers work nine. Nearly all the granite cutters belong to a union. It is interesting (Mr. Keating adds) to note the popularity of artificial stone, concrete, or granolithic as it is variously called, for use on footpaths, &c. The artificial stone is made by mixing gravel or ground stone with cement. A great deal of it is also used for foundations. The Grand Trunk Railway, when building their last elevator, which is the largest on the Atlantic coast, excavated a large area, then drove in 4,000 piles in clusters of eight or ten close together. The tops were then sawn off to make a level surface, and on these surfaces the artificial stone foundations were laid; for this one structure 5,500 barrels of cement were used, together with 3,500 cubic yards of crushed stone and 2,000 yards of sand. The great advantage of using artificial stone in laying foundations is that it can be manufactured on the spot, thus saving valuable time; also that it can be cast into any form and made to correspond to any desired shape. It has the strength of natural stone when properly made, and it is said that it will outlast it, as moisture, climate, acids, or anything that sometimes disintegrates natural stone seem to have no effect on concrete. Brickmaking has taken a fresh start in Maine, and particularly in Thomaston, where clay has been discovered containing a large percentage of pyrites of iron, more than in ordinary brick clays, and it is said to be absolutely free from sand, stone, and lime. A company has been formed and a new process introduced for the manufacture of bricks; from this process sand is entirely eliminated, and the equipment of the new plant is described as being as different from the ordinary brickyard as the hand loom is different from the modern cotton mill. A company is also establishing a new line of trade with a product which is its exclusive property, made by a process protected by patent rights. This product is a pure prepared white lime, and to produce it the company has expended thousands of dollars in fitting up a mill at Rockland and another in New York to give it final preparation for the market. The lime is taken directly from the kiln to the mill where it is hydrated by the patent process. It comes out of the mill in the form of a dry white powder, which is put into bags and sent to the market in that form. Ordinary lime cannot be hurried in any of its processes, but the new product is expedition itself and permits many combinations to meet different needs

GENERAL BUILDING NEWS.

ENLARGEMENT OF FISHPONDS CHURCH, BRISTOL.—The new aisle and vestry at Fishponds Church were dedicated on the 8th inst. The addition is the second instalment of a scheme that practically amounts to a rebuilding, the first, some years ago, being that of the chancel and its side aisles. It was decided two years ago that the size of the work to be accomplished made it impracticable to advance with more than an aisle 71 ft. long, and 20 ft. wide on the north side for 250 persons. Whilst this was building, however, it was found possible to add a vestry at its eastern end. The walls are constructed of rock-faced pennant stone laid in level courses, plastered internally with a painted cement dado, the roof being waggon-boarded on arched ribs, and covered with brindled Broseley tiles. The nave is divided off by five arches supported on pennant stone columns with moulded capitals. An additional doorway has been provided in the north wall. The floors, both of aisle and vestry, are laid with wood blocks, and the passages with encaustic tiles. The new seats and vestry screen are of ornamental character, and are executed in varnished pitch-pine. The stone carving has been executed by Messrs. Davey & Bushell, the general contractor being Mr. Edwin Clark, and the architects Messrs. Lingen Barker & Son, all of Bristol. The estimated expenditure for the new work is 1,800*l.*

ST. ANDREW'S CHURCH, LINACRE, LANCASHIRE.—The foundation-stone has just been laid of the Church of St. Andrew, Linacre, in the parish of Litherland. Internally, the church will consist of a nave 89 ft. long by 37 ft. wide, containing seating accommodation for 522 persons, which, with the side aisles, gives a total width of 48 ft. The chancel is 34 ft. long by 26 ft. wide, containing accommodation for twenty-six men and boys. The choir and clergy vestries are placed on the north side of the chancel, with entrance-porch and lavatory. The organ-chamber and south entrance-porch occupy the south side of the chancel. Facing Stanley-road is the west front, with an entrance-porch on either side. The narthex, including the side porches, is 48 ft. long. The nave is divided from the side aisles by six arches. All the internal arches and nave piers are in Storeton stone, the walls being finished in tinted plasterwork. Floors of aisles, nave, narthex, and baptistry are laid with wood blocks, the floors under seating being in red deal boards. The two porches on either side of the west entrance are paved with red tiles. Hopton Wood stone is used for the chancel floor, laid in 12-in. diagonal squares. The pulpit and low screen, between chancel and nave, are also in Hopton Wood stone. Fumigated oak will be used for the choir stalls, holy table, and rail. A hammer beam timber roof will span the nave, with a cornice under it ornamented by moulded brackets. The roof will be barrel vaulted, lined with narrow boarding laid longitudinally. Over the chancel is a hexagonal roof with moulded ribs, lined with narrow boarding. The church will be seated with chairs. A font is placed at the end of the north aisle in an octagonal baptistry, and will be executed in white stone. Externally the church will be faced with red bricks, the windows and other dressings being in terra-cotta. Over the west front is placed a traceried window 22 ft. high, the lower part being divided into seven lights by moulded mullions. The heating will be carried out by Messrs. Cooper. The church has been designed and is being carried out under the supervision of the architects, Messrs. Willink & Thicknesse. The contractors for the whole works are Messrs. Morrison & Sons, of Wavertree.

METHODIST CHURCH, LONDONDERRY.—The new church which has been erected in Carlisle-road, Londonderry, has just been opened. The tower and spire of the new building rise to a height of 110 ft. The buildings consist of church, Sunday school, lecture hall, four classrooms, tearoom, pantry, ladies'-room, lavatories, and church parlour. Provision is also made for a minor hall under the church, and the heating-chamber is placed on the lowest level. The seating accommodation is for 630 persons, inclusive of gallery. The pulpit is of pitch pine, provided with mahogany lectern, and the choir and organ loft are behind the pulpit. The architect is Mr. Alfred Forman, of Londonderry, and the builder Mr. Robert Colhoun, of Londonderry.

SOUTH CLIFF CONGREGATIONAL CHURCH, LOWESTOFT.—The opening service of this church was held on the 14th inst. The church consists of nave and double transepts, the latter being at present erected only projecting a few feet. The facings are of red brick and the dressings of white Costessey work. The roofs are of open timber construction of the hammer beam type. The seating is of oak, wax polished. A square tower with angular pilasters and terminating with a lead-covered spirelet and weather-vane forms a feature of the design. The contract was let to Mr. John Ashbury, Woodbury, Lowestoft, and amounted to 1,698*l.* The accommodation of the building is for about

430 adults. The architects were Messrs. George Baines & R. Palmer Baines, Clement's Inn, Strand, London, W.C.

CHURCH, SUTTON COLDFIELD.—It is proposed to erect a permanent church in the Maney district of Sutton to replace the present iron structure. It has been decided to instruct Messrs. Cossins, Peacock, & Bewlay, of Birmingham, to prepare plans of a church to provide sittings for 600 people, the plans to be prepared in such a manner that if found necessary, part only of the church capable of holding 400 might be built.

CHURCH EXTENSION, DOWNEND, BRISTOL.—St. Stephen's will be the title of a new church the foundation-stone of which will shortly be laid at Soundwell, which is part of the ecclesiastical parish of Downend. The architect is Mr. Henry Bennett, of Staple Hill. At present it is only proposed to erect the nave and one aisle, at an estimated outlay of some 2,000*l.*, and to leave the chancel and the second aisle to be accomplished in the future. The work thus to be first executed will accommodate some 450 persons.

WESLEYAN CHAPEL, LONGWOOD, YORKSHIRE.—The memorial-stones of this building have just been laid. The new chapel will be Gothic in style, and it will be faced with Elland Edge wall stones. The principal features in the front elevation will be a doorway entrance, flanked with projecting pilasters and three two-lighted traceried windows over, and the windows in the side elevation will also be traceried. The church will be 54 ft. 8 in. long, and 30 ft. 6 in. wide, with transepts 11 ft. 6 in. deep, and will accommodate 700 persons. The body of the church will be divided by two aisles which communicate with a vestibule at the east end of the church. There will be three entrances, one for the ground floor, and two for the galleries, and also a side door for the use of the minister, choir, and scholars. There will be a gallery on three sides, containing two rows of pews. The church will be fitted throughout with open pews. The ceiling will be boarded and octagonal in shape. The church will be heated by hot water on the low-pressure system, and will be lighted by electricity. The vestries and a lavatory are provided on the ground floor. There will be two classrooms in the basement, 32 ft. 5 in. by 20 ft. and 31 ft. 5 in. by 21 ft. 6 in. respectively, and a bellows-room and storeroom, and underneath the latter will be the heating apparatus room. There will be two entrances in the basement, and two flights of stairs leading to the ground floor. The church is estimated to cost 6,500*l.* The plans have been prepared by Mr. Joseph Berry, architect, Huddersfield, and the works will be carried out under his supervision. The following are the contractors for the various works:—Masons, Messrs. T. Bottomley & Sons, Lindley; joiners, Messrs. Wood Bros., Huddersfield; plumbers, Messrs. J. H. Taylor & Co., Huddersfield; plasterers, Messrs. J. Robinson & Son, Marsh; painter, Mr. Albert Wrigley, Longwood; slater, Messrs. T. Mallinson, Milnsbridge; iron-work, Messrs. Calvert & Co, Folly Hall; electric lighting, Mr. Thos. Armitage, Huddersfield.

PRIMITIVE METHODIST CHAPEL, BORROWASH, DERBYSHIRE.—The foundation-stones of a new Primitive Methodist chapel have just been laid at Borrowash. Mr. F. S. Antliff, of Draycott, is the architect, and Mr. G Wagg the builder.

ST. LEONARD'S CHURCH, WALTON-LE-DALE.—The scheme for the restoration of St. Leonard's Church, Walton-le-Dale, near Preston, at a cost of between 8,000*l.* and 9,000*l.*, has been settled. The plans have been prepared by Mr. Seddon, of London.

CHRISTIAN BROTHERS' SCHOOL, CORK.—The foundation stone of the Brother Burke Jubilee Memorial Schools, Our Lady's Mount, was laid on the 8th inst. The new buildings are one story in height, 162 ft. long by 27 ft. wide. The chemical laboratory is 31 ft. long and 24 ft. wide; classroom for ditto, 24 ft. by 20 ft. 6 in.; physical laboratory, 31 ft. long by 24 ft. wide; classroom, 24 ft. by 20 ft. 6 in. In connexion with both laboratories are preparation rooms. At the end nearest to Gerald Griffin School is placed in the basement a furnace chamber for heating apparatus; the space over is devoted to smaller apartments. The building is faced with red bricks, relieved by buff bands and limestone copings, crosses, &c. It is designed in the same style as the "Gerald Griffin Memorial" adjoining. The buildings are from the designs of Mr. Samuel F. Hynes, architect, Cork, and the builders are Messrs. E. & P. O'Flynn, of Cork.

NORTH RIDING COUNTY HALL, NORTHALLERTON.—Plans have been adopted by the County Council for the new County-hall at Northallerton. The principal façade of the hall will face the approach to the main road, and will be set back 200 ft. from the boundary line, in order to provide a forecourt, and allow of wings being projected on each side when necessary for future extension. The front of the building will be 200 ft. long, and will consist of a central block with projecting wings. This block will contain the principal entrance, the vaulted entrance hall with stone columns, writing and waiting-rooms, porter's office, and telephone-room, and the grand staircase (of polished limestone) leading to the upper floors. The north and south wings provide accommodation for the department of the clerk to the Council, and for that of the Secretary of Education, or the County Surveyor. Entrances are arranged at each of the corridors and service staircases to the upper floor. Advantage has been taken of the fall in the site to obtain (under the council chamber) stores for the Technical Instruction Department and for deeds They will be entirely above the ground level, and the technical instruction stores will have access for carts from Racecourse-lane. The council chamber and ante-room are situated on the first landing, or mezzanine floor, 6 ft. above the ground-floor level. The council chamber is square in shape, and the seats are arranged in lines radiating from the chair. There will be corridors and entrance-doors along each side of the chamber, and a public gallery, with access by a separate staircase, as well as a gallery for friends of the members, and accommodation for the officials and reporters. On the first floor the plans provide in the south wing grand committee-room, three other committee-rooms of varying sizes, Chairman's room, members' retiring room, all arranged en suite, and in the north wing the County Surveyor's or the Education Department's offices. The elevations are English Renaissance in style. The materials proposed to be used are local brick, faced with bright red Leicestershire brick, with Whitby or Farndale stone dressings, and green Westmorland slates for the roofs. The building has been designed by Mr. W. H. Brierley, of York, the County Architect.

LIBRARY, WAVERTREE, LIVERPOOL.—The new branch free library and reading-rooms, Picton-road, Wavertree, were formally opened on the 12th inst. Besides the lending library there is a general reading-room, and there is also a special reading-room for women. A similar room has also been set apart for boys, while a section of the premises is occupied by a juvenile library. Some time ago the City Council bought 5,000 sq. yds. of land, formerly the site of Davies's Nurseries, and the library and reading-rooms take up about 1,500 sq. yds. A portion of the remaining site is to be occupied by public baths, now under consideration. The building stands back about 40 ft., and is built of red-pressed bricks and Cefn stone, whilst the roof is covered with green Westmorland slates. Mr. T. Shelmerdine, the City Surveyor, was the architect of the building. The cost of the building and the furnishing amounts to over 8,000*l.*

MUNICIPAL BUILDINGS, WOOLWICH.—The Mayor of Woolwich (Mr. J. J. Messent) on Wednesday last week laid the foundation stone of new municipal buildings for the borough of Woolwich. The Town Clerk stated that the site cost 15,000*l.*, and had an area of 9,000 sq. yds. The buildings had been designed by Mr. A. Brumwell Thomas, of Westminster. The contract price was 50,000*l.*, the builders being Messrs. J. E. Johnson & Son, of Leicester. The buildings would consist of a basement and three floors, with a dome and a clock tower rising to a height of 140 ft.

CHILDREN'S HOMES, ELY, GLAMORGANSHIRE.—New children's homes have been erected by the Cardiff Board of Guardians at Ely. The buildings have been erected by Mr. C. C. Dunn, Cardiff, from the designs of Mr. E. W. Seward, on the guardians' freehold property adjoining Ely schools. They are built of red brick and white stone. There are six buildings altogether, the master's house, with various storerooms adjoining, two detached and two semi-detached cottages, each to hold twelve children and a foster-mother, and a larger building to accommodate twenty-four, where the older boys will be lodged. Each cottage contains dormitories, a common room for the children, kitchen, &c. There is also the hospital, which was built some years ago. The cost of building the homes was about 8,000*l.*

PROPOSED EXTENSION OF BLAWARTHILL HOSPITAL, CLYDEBANK.—At a meeting of the Clydebank and Renfrew Joint Hospital Board satisfaction was expressed that the Town Council of Renfrew had now seen their way to approve of the extension of the hospital and the plans prepared therefor. The architect (Mr. Paterson) was instructed to proceed with the working plans and other details to be submitted to the Local Government Board, and also to prepare the necessary specifications. The proposed scheme is to give accommodation for thirty-four new beds, making a total, with existing beds, of sixty-four. The buildings consist of new scarlet fever pavilion, with acute wards connected to existing scarlet fever pavilion by an open covered way, and to which new duty-rooms have also been added; isolation block and extension and alteration of present administrative and laundry blocks, and new stables to be placed at south boundary wall. The pavilion in appearance will be similar to those existing, with slight alterations on plan. The extensions are estimated to cost over 12,000*l.*

BUSINESS PREMISES, HALIFAX.—The foundation stone of Messrs. Scott's, Ltd., new premises to be erected in Commercial-street, Halifax, has just been laid. The architect is Mr. W. Clement Williams, Halifax.

LIBRARY, BRISTOL.—A new Central Library is to be erected at Bristol, from the designs of Mr. Percy Adams. The site is in Deanery-road.

ARTIZANS' DWELLINGS, SEVENOAKS.—The Plans, Sanitary, &c., Committee of Sevenoaks Urban District Council have just recommended that twenty cottages for the Sevenoaks Artizans' Dwellings Co. be approved, subject to an intercepting trap to each house drain being provided, and subject to the usual agreement for a combined drain. The report was adopted.

COUNTY TECHNICAL AND SECONDARY SCHOOLS, MALMESBURY AND DISTRICT.—These schools were opened on the 14th inst. by Sir John Dickson Poynder, Bart., M.P. Messrs. Smith & Light were the contractors, and the cost, inclusive of fittings, but exclusive of the cost of the site, was between 4,100*l.* and 4,200*l.* The architect was Mr. R. E. Brinkworth, of Bath.

ADDITION TO THE HAHNEMANN HOSPITAL, LIVERPOOL.—An addition, consisting of new nurses' home, washhouse, and laundry, has been made to the Hahnemann Hospital. The building occupies the south-west angle of the hospital plot, with one frontage to Rice-street, and consists of three floors, the lower one being used for a washhouse and laundry. The two upper floors are arranged as a nurses' home, and are approached by a glass passage from the hospital, with a staircase leading to the first floor, where a sitting-room and two bedrooms, bathroom, and lavatory are provided. The second floor has three bedrooms, stores, cupboards, &c., and all rooms are provided with fireplaces. Externally the building is of grey brick, with red brick finishings, slate roofs with red ridges. The work has been carried out by the general contractors, Messrs. Holme & Green, from the designs of Mr. Francis U. Holme, architect to the hospital.

RECONSTRUCTION OF THE UNITED FREE CHURCH ASSEMBLY HALL, EDINBURGH.—This building has been reconstructed from the plans prepared by Mr. Dick Peddie, architect. The altered building will seat 1,861, or an increase of 525. In order to get this additional room it was found necessary to absorb the buildings which formerly existed to the east of the hall proper. With an increased area the previous height of the building was inadequate, and as it was desired as far as possible to preserve the features of the old hall, it was finally decided to leave the roof as it was, but to lower the floor 5 ft., adding to the height of the roof supports to meet the altered conditions. Formerly the area measured 62 ft. by 53 ft.; now it extends to 93 ft. by 67 ft. For the purposes of debate the hall has been surrounded on all four sides by division lobbies, to which there are numerous doors of access. The division lobby to the north is immediately in connexion with the north corridor, which forms the access to the galleries set apart for the use of the public, and the division lobbies are also in communication with the Lawnmarket by staircases at the south-east and south-west corners. Off the division lobbies there is cloakroom and lavatory accommodation. Two new rooms have been set apart for the Moderator of Assembly—a reception-room and a private room, which are entered from the north corridor—and there is a special ladies' room, which can be reached both directly from the north corridor and from the ladies' gallery. The staircases at the south-east and south-west corners rise from the Lawn-market level to the upper floor, which is placed over the south gallery, where there is a smoking-room for members of the House, as well as a museum. The internal furnishing and equipment generally have been carried out by Messrs W. S. Brown & Son. It is believed that the total cost of the alterations will exceed 20,000*l.*

REBUILDING OF ABERGWILI PALACE.—Mr. Coombs, architect to the Ecclesiastical Commissioners, has inspected Abergwili Palace ruins and surroundings, and we understand that operations for the erection of a new building on the same site will be proceeded with forthwith.—*South Wales Daily News.*

NEW BANK, MANCHESTER.—The site of the old Town Hall, Manchester, has recently been sold by the Corporation. The land covers 1,500 square yards, and has been purchased at 110*l.* per yard for a client by Messrs. Charles Heathcote & Sons, architects, for the erection thereon of a bank and general offices.

THE BUILDING TRADE, AUCKLAND.—The building trade is very brisk in the Auckland rural district. Houses are being erected in various parts of the district, and just outside Coundon several hundreds of dwellings have been put up for workmen. At the last meeting of the Rural District Council it was reported that fifteen sets of plans had been submitted for the erection of some 142 houses. The plans were approved in all except two instances.

LABORATORIES, LIVERPOOL UNIVERSITY.—The new Johnston Laboratories at Liverpool University have now been completed. The gift of Mr. Johnston embraced a sum of 10,000*l.* for the endowment of a Chair in Bio-Chemistry, 6,000*l.* for the Fellowship, and 9,000*l.* for the buildings. The building adjoins the Thompson-Yates Laboratory, and for the time being completes the equipment of the School of Medicine Research Department. There is a basement and three floors, equipped with the latest apparatus. The departments of research include tropical medicine, bio-chemistry, experimental medicine, and comparative pathology. The laboratories have been erected from designs by Messrs. Willink & Thicknesse, and Professor Simpson.

CO-OPERATIVE SOCIETY'S PREMISES, HUDDERSFIELD.—Extensions are to be made to the premises belonging to the Co-operative Society in Buxton-road, Huddersfield. The extensions are to what are known as the Victoria Hall premises. A consider-

able portion of those premises will be pulled down, but the hall itself will practically remain untouched, and will therefore be available for meetings, concerts, entertainments, &c., as heretofore. The new part will embrace a frontage of 92 ft., the height from the footpath to the top of the parapet will be 54 ft. (that is, exclusive of the roof), and the depth from front to back will be 52 ft. The style of the new addition will be in keeping with the other part of the premises—Classical—and rising from the central front there will be a clock tower, and the clock will have three faces. The building will have a basement, a ground floor, first and second floors, and an attic. In the basement will be a restaurant 70 ft. long and 38 ft. wide, together with a kitchen and scullery, and store-rooms for the furniture and boot and shoe departments, with the necessary hoist communications with the rooms above. On the ground floor there will be the furniture, boot and shoe, and confectionery departments, and in the centre a vestibule, 10 ft. 6 in. wide, leading to the present Victoria Hall. On the first floor will be four showrooms connected with the various departments, and on the second floor will be the rooms connected with the educational department, consisting of a lecture-room capable of accommodating 250 persons; a library, 31 ft. by 26 ft.; a reading-room, 29 ft. by 27 ft.; and a conversation-room. The attic is to be used for storage and as a workshop. Lavatory accommodation is to be provided in the basement and on the second floor. The building will be of fireproof construction, and electrically lighted, and heated by steam. Behind the new premises there will be a road or covered passage, which is to communicate with the yard behind the present shops and will form a communication between Princess-street and Alfred-street. The cost of the additions will be 10,000*l.* The contracts have been let to the following:—Masons' work, Messrs. A. Graham & Sons, Springdale; carpenters and joiners, Messrs. Wood Bros., Queen-street, South; plumbers and glaziers, Messrs. D. Taylor & Sons, Lockwood; slaters, the executors of T. B. Tunnacliffe, West Parade; plasterers, Messrs. Broadbent Bros., Moldgreen; steel and iron work, Messrs. E. Wood & Co., Ordsal-lane, Manchester; patent glazing, Messrs. W. H. Heywood & Co., Birkby; partitions, the Fireproof Clay Co., Bradford; concreting and wood block floors, Mr. John Cooke, Folly Hall; shop fronts, Messrs. Maffin & Co., Alfred-street, Huddersfield; painters' work, the Society's own workmen; and the work will be carried out from designs supplied by, and under the superintendence of, Mr. J. Berry, architect.—*Huddersfield Examiner.*

FREE LIBRARY, MONTROSE.—A new free library is to be erected at Montrose at a cost of about 6,000*l.* The architect is Mr. J. Lindsay Grant, Manchester. The principal entrance is placed at the junction of Bridge-street, Mill-road, and High-street. A hexagonal hall forms the centre, from which radiate the general reading-room, reference-room, lending department, staircase, and principal entrance, &c. The lending department accommodates 26,000 volumes. From the public space there is accommodation to the ladies' reading-room and juvenile room. The reading-room accommodates forty readers at tables and eighteen at newspaper stands, this room being lit from windows to High-street. The walls are panelled in glazed tiles. The reference room has shelves from floor to ceiling, and accommodates 5,250 volumes, and twenty-four readers at tables. The men's lavatory is entered off from the hexagonal hall. The librarian's house is entered from Mill-road, and occupies the first floor over the workroom and reference-room facing Mill-road. Over the general reading-room there is a recreation hall, the walls of which are panelled in wood to a height of 7 ft.

HOSPITAL, HORWICH.—The corner stone of the Infectious Diseases Hospital which is in course of erection for the townships of Horwich, Westhoughton, and Blackrod, on land adjoining Fall Birch-lane, off Chorley New-road, Horwich, was laid recently. Messrs. Cressey & Keighley, of Morecambe, are the architects, and Mr. J. Slater, of Horwich, is the general contractor. The hospital buildings—which include three ward pavilions, the administrative block (three stories), a laundry, disinfecting block, &c.—will be of local brick, with local stone dressings, roofed with mottled blue slates from Wales. The floors of the wards will be of polished maple.

FOREIGN.

INDIA.—The proposed Kistna reservoir, when irrigation is fully developed under it, is estimated to irrigate 2,500,000 acres, at a cost of six millions sterling.——Station buildings are to be constructed at Church Gate Station on the Bombay, Baroda, and Central India Railway, at the cost of Rs. 44,854.——The schemes for the improvement of the port of Aden are well matured. They include the construction of a public wharf in Tawahi Bay, the dredging of the inner harbour, and the extension of the Maala pier. The Government is to carry out the work.——A new press office is to be built at Ootacamund adjoining the secretariat. There are to be quarters for several compositors, office accommodation, &c. The work is in connexion with the establishment of the Government at that place——A central telephonic exchange, to which the numerous Government offices are to be connected, is to be instituted at Simla.

MISCELLANEOUS.

THE BUILDING BY-LAWS REFORM ASSOCIATION.—This Association, which was recently formed to secure that official control of private buildings shall not extend beyond the demands of public health and safety, met a few days ago at the offices, 45, Parliament-street, Sir William Chance, Bart., in the chair. There was a good attendance and, on the motion of the Hon. Percy Wyndham, the Duke of Westminster was unanimously elected President of the Association. A proposal was made for the appointment of a special committee to consider and report on the amendments required to secure the removal from existing by-laws of those provisions which unreasonably encroach on individual liberty. A long discussion followed in which Mr. W. M. Acworth, Mr. Lacy Ridge, Mr. A. H. Clough, Mr. Mark H. Judge, Mr. W. Henman (Birmingham), Mr T. M. Shallcross (Liverpool), Mr. Thackeray Turner, Mr. E. D. Till and Mr. R. A. Read, Hon. Sec., took part. The special committee was appointed and letters asking for advice for the amendment of by-laws at Guildford, Bucklow, and Bradfield were referred to it.

SALE OF CLIFFORD'S INN.—By direction of the trustees and members of the Society, and under an order of the Chancery Division of the High Court of Justice, Messrs. Farebrother, Ellis, Egerton, Breach, & Co., offered for sale at the Mart, Token-house-yard, on the 14th inst., the freehold estate "Clifford's Inn." The auctioneer pointed out that it was nearly an acre in extent, and that the buildings upon it, including the historic hall, produced a nominal present income of 2,550*l.* per annum. He suggested that the property was worth 150,000*l.* The first bid, however, was one of 100,000*l.*, made by Mr. W. Willett, who, as there was no advance on this figure, became the purchaser.

OPEN SPACES.—In response to representations made to him by various clubs who use the ground, Colonel Tufnell, M.P., has consented to relinquish his plans for building over Tufnell Park, Holloway, recently acquired by him, and at some pecuniary sacrifice to arrange for the renting of the ground for purposes of recreation and athletic sports as heretofore.——The Board of Agriculture have drafted an amending scheme relating to Farnborough Common and Broad-street, Green-street, and Leach's Greens, Kent, in order to place the four commons under the management of the Farnborough Parish Council, who will be charged with the maintenance of the ground free from encroachments, the preservation of the turf and trees, the execution of drainage and levelling works, and the apportionment of spaces for games.—The Board's provisional order for the better regulation and management of Merrow Downs (260 acres of common land) near Guildford, provides for an adjustment of rights of common of pasture and estovers, and sets up a body of conservators; whilst the privileges granted to the Guildford Golf Club are not curtailed, a right of access to the downs for walking and riding is reserved to the public; the labouring poor of Merrow, besides such persons as now enjoy rights of estover, will be allowed to gather fuel and litter from a certain allotment of land; the Earl of Onslow, lord of the manor, and the Rural District Council have mutually agreed to a discontinuance of flint-collecting, and the Guildford Town Council agree to contribute 50*l.* yearly towards the charges of control and improvement.——Broomfield Park, at Southgate, opened to the public on April 25, comprises 54 acres purchased from Mr. Powys Lybbe for, it is stated, 25,000*l.*; the park, of which some 30 acres is woodland and 9 acres are allotted to playing-fields, with three lakes, is famed for its beautiful avenue of elm-trees; the house, a hunting-lodge of James I., will be converted for reading and class rooms; it contains a fine oak staircase of which the walls and ceilings were painted by Thornhill; the estate, adjoining Arno's Grove, had been occupied during several generations by the Jackson family.——The St. Pancras Borough Council have agreed to the closing of Bromwich Walk, skirting the grounds of Holly Lodge, Highgate, a residence of the Baroness Burdett-Coutts, and to accept an offer made by her of some adjacent land, with its trees, together with a contribution of 1,000*l.*, which will enable them to widen Swain's-lane to a uniform width of 45 ft., and to convert it into an attractive boulevard, rising from the foot of West Hill northwards between Highgate Cemetery and Bromwich Walk; the land thus given by the Baroness has an area twice that of Bromwich Walk.——A local movement is in progress for saving the Springfield estate, of 33 acres, at Upper Clapton, which is placed in the market for building purposes; the land lies upon a hill-side which descends to the River Lea, and with its dells, pools, and variety of verdure should form one of the most charming resorts within the limits of north-east London, albeit situated close to the crowded localities of Bethnal Green, Hackney, and Homerton——The Bethnal Green Borough Council have committed to the charge of the London County Council, for its maintenance as an open space, the burial ground, nearly two acres in extent, of the Church of St. Matthew; and the gardens of Sydney-square and Ford-square, Stepney, covering an aggregate area of about 32,900 sq. ft., will henceforth be placed under the control of the London County Council, the property having been sold for 13,000*l.* by the owner, who contributed 3,000*l.* in reimbursement of the costs of the sale to the Council; the Borough Council of Stepney contribute 1,500*l.* towards the purchase moneys.——The Thames Conservators have consented to the reservation of a public right of way over the proposed tow-path below Marlow Lock, which will form—at an outlay of 1,000*l.*—a most pleasant promenade by the riverside.——The Governors of the Manchester Whitworth Institute decided at their meeting on May 6 to present to the City Council the park of 20 acres in Oxford-street which they have maintained as a public recreation ground during the last thirteen years.——Mr. Carnegie, Lord Rector of St. Andrew's University, has offered to purchase a park of 9 acres, situated on the west side of the city, and to dedicate it to the use and enjoyment of the members of that University.

ST. MARY'S CHURCH, HORSEFERRY-ROAD.—The Society of St. Vincent de Paul intend to establish a boys' institute as a memorial to the late Mr. George Blount, a former president of the Society, upon the site of the Roman Catholic Church of St. Mary, in Horseferry-road, Westminster. St. Mary's Church has hitherto served for a mission directed by the Jesuit Fathers. The church having been closed, Cardinal Vaughan has set aside, as a temporary measure, for the use of the congregation the Lady Chapel of Westminster Cathedral, which, until the formal opening of the cathedral, will be used as a parish church by the Roman Catholic community of Westminster, and by the Nationalist Members when Parliament is in session.

WIDENING OF BISHOPSGATE-STREET.—The City Engineer has prepared plans for the widening, at an estimated cost of nearly 334,000*l.*, of the main thoroughfare to a uniform width of 70 ft. between the City boundary and Angel-alley. The scheme is projected by the Public Health Department of the Corporation, who seek the co-operation of the London County Council, as they consider the proposed improvement is a metropolitan one in the benefits it will provide for the greatly increased traffic passing north and south in that quarter.

WHAPLODE DROVE PARISH CHURCH.—A report has been prepared by Mr. Harold Bailey upon the condition of the fabric of the church of St. John the Baptist, at Whaplode Drove, near Crowland, in Lincolnshire. He recommends that 700*l.* should be expended upon the reparation of the church, which consists of a chancel, nave, and turret, and has a capacity for 300 persons. Forty years ago, in the course of making a dyke for enclosing an addition to the churchyard, was found a large quantity of Roman pottery-ware, together with coins of Vespasian the elder, A.D. 69-79, and Antoninus Pius, A.D. 138 61.

ESHER AND ST. GEORGE'S CHURCH.—An appeal is made for contributions towards the reinstatement of the old parish church of St. George, formerly known as Sandon Chapel, which was closed for public worship some while ago, and has fallen into a bad state of disrepair. The church contained an altar-piece of our Saviour painted by Sir Robert Ker Porter, K.C.H., and presented by him in 1837, a monument by Flaxman (1803) to the Honourable Mrs. Ellis, wife of Mr. C. Rose, of Claremont, and a marble figure erected by Sir Francis Drake in memory of his father Richard, equerry to Queen Elizabeth, since removed to the new church that was built fifty years ago. Sir John Vanbrugh built for his own occupation an adjacent house, which he sold to Thomas Pelham Holles, Marquis of Clare, and afterwards Duke of Newcastle, who named it Claremont, and added largely to the estate, employing Kent to lay out the grounds. Robert Lord Clive bought the property in 1766, and before setting out on his last journey to India, directed Lancelot Brown to pull down Vanbrugh's house and build another one on a better site, and to re-model the grounds, without any limitation of expense—the charges amounted to nearly 100,000*l.* After Lord Clive's death on November 22, 1774, the property was sold for about 35,000*l.* to Viscount Galway; it was then purchased by Lord Tyrconnel, who, in 1807, sold it to Mr. C. Rose Ellis. In 1816 Claremont was bought by the Crown for 65,000*l.* on behalf of the Princess Charlotte, who died there on November 6, 1817: it has latterly been the home of Queen Victoria in her girlhood, of King Louis Philippe and his widow, Queen Amélie, and of the late Prince Leopold and his wife the Duchess of Albany. When commanded to surrender the Great Seal, Cardinal Wolsey retired to Esher Place, a manor bestowed upon the See of Winchester by Edward I. The manor house, distinguished by the so-called "Wolsey's Tower," built by William de Wainflete, Bishop of Winchester 1447 86, and a residence of William of Wykeham, who wrote many extant letters at "Asher House," was bought by Henry Pelham, brother of Thomas, Duke of Newcastle, in 1729. Kent made additions to the house, adopting one of the two gateways as the central feature of his design. Subsequently Edward Lapidge built the present house, upon higher ground remoter from the River Mole, for John Spicer, who bought it from Miss

Pelham, and pulled down all of Kent's work, but retained one of the two gatehouses. The tower, of red brick, which may be compared with those of Layer Marney (illustrated in the *Builder* of April 3 and 10, 1886) and Lees, near Felstead, has large octagonal turrets; the third and fourth stories are machicolated. E. W. Brayley, in his "Surrey" (1841), cites the newel staircase of brick, in the roofing of which, he says, "the principles of the construction of the oblique arch (a supposed invention of modern times) are practically exhibited." In Richardson's "Vitruvius Britannicus," 1802, vol. i., which gives plans and elevations of Claremont, the authorship of the designs is ascribed to Brown and Holland conjointly.

SHREWSBURY ABBEY.—We understand that it is proposed to take steps for effecting a restoration, at a cost of 2,000*l.*, of the tower of the abbey church. The church of Holy Cross, which stands by the river Rea, commonly called the Meole brook, in Abbey Fore-gate, was originally a conventual church of Benedictines, under a mitred abbot, and having a revenue at the dissolution, estimated at 615*l.* 4s. 3d. The abbey, dedicated to SS. Peter and Paul, was founded in 1083-7, by Roger, Earl of Roger de Montgomery, first Earl of Shrewsbury, Chichester, and Arundel, who built the castle, of which the exterior stonework was restored by the late Duke of Cleveland in 1886-7, under the superintendence of Mr. J. P. Pritchett, of Darlington. Roger's reputed effigy is preserved in the church. The church was originally 302 ft. in length, having a transept 133 ft. long from north to south, a choir of 69 ft., and a lady chapel 50 ft. long, and a central tower 30 ft. square at base. In 1887 the late J. L. Pearson, R.A., carried out, at a total cost of 11,600*l.*, the rebuilding of the choir, the work comprising the chancel, crossing, north and south vestries, one bay apiece of the north and south transepts, and the arching and groining of the chancel roof; seven years afterwards he superintended some further restoration, rebuilding the clearstory and renewing the roof of the nave.

A NEW TECHNICAL DICTIONARY. — In the beginning of 1901 the Society of German Engineers (Verein Deutscher Ingenieure) began the compilation of a universal technical dictionary in the three languages, English, German, and French. This undertaking has received assistance from all quarters at home and abroad. Societies and individuals have responded generously to the invitation to collaborate, and have proved their interest by the transmission of collections of technical words made by them or by promising such in the near future. Up to now (May, 1903) there are 341 societies (42 in English, 272 in German, and 27 in French speaking countries) co-operating in the work, either by the systematical collection of technical expressions of the specialities represented by them or in other ways, especially by the acquisition of collaborators and by placing technical publications in more than one language at the disposal of the "Verein," as catalogues of firms, inventories, piece-lists of machines, handbooks, &c. Through these societies the Technolexicon has found helpers in Great Britain, Germany, France, the United States, Austria, South Africa, India, Australia, Belgium, Canada, &c. As the contributions will not be called in before 1904, all who wish to help in the compilation of the Technolexicon have still time and opportunity to assist in the preparation of their specialities. Attention is to be drawn to the fact that contributions in only one language are also most acceptable, though, of course, those in two or three languages are the most valuable, as also polyglot business catalogues and other technical publications. The address of the editor-in-chief is, Technolexicon, Dr. Hubert Jansen, Berlin (NW. 7), Dorotheenstr. 49.

THE ROYAL ARMS ON BUILDINGS.—In our issue of April 11 last (see page 398 *ante*) we described the circumstances under which a summons had been served upon Mr. Henry Glave, in the matter of the Royal Arms which appear, several times repeated, upon the façade of the business premises he occupies in New Oxford-street. The case was adjourned to enable Mr. Glave, as lessee, to come to some arrangement with the Commissioners of Woods, Forests, and Land Revenues to whom the premises belong. After the hearing of the adjourned summons at Bow-street on May 7, the magistrate dismissed the summons without costs. The defendant had agreed meanwhile to the removal of the coat-arms by the Royal Warrant Holders' Association, provided the Crown would exempt him from his covenant to surrender the buildings undefaced and with all their architectural decorations untouched. As he could not obtain such an indemnity, Sir A. de Rutzen decided the case upon its merits.

RESTORATION OF A CROSS AT SHILLINGSTONE, DORSETSHIRE.—The recently renovated village cross at Shillingstone, near Blandford, has just been dedicated. Some eleven years ago a lady offered to restore the cross, and with this end in view Mr. Charles E. Ponting, F.S.A., architect, of Marlborough, made the necessary plans, taking the old cross of the same date—still in fair condition, and unmutilated—at Stalbridge, Dorset, as the motif for the new work. The actual work of restoration was placed in the hands of Messrs. Harry Hems & Sons, of Exeter. When all was nearly ready for fixing, a protest was made against the Cross, with the result that completion was put off indefinitely. After more than ten years' delay the work has now been erected. The shaft is, like all the rest, of Ham Hill stone.

GALVESTON SEA WALL.—We learn from an official report that a public work of great importance to the town of Galveston, Texas, U.S.A., was begun during the year 1902—viz., the construction of a sea wall. It was the universal opinion of the inhabitants, after realising the disastrous effects of the dreadful storm of September 8, 1900, that some effort should be made to protect that side of the island exposed to the waters of the Gulf of Mexico. The committee in charge of the matter succeeded in placing no less than 1,500,000 dols. worth of bonds, the greater portion of which were taken by local firms and individuals, a most striking instance of courage and faith in the future of the port of Galveston. The construction of the sea wall or breakwater has recently been commenced, and it is estimated that eighteen months from now will probably see it completed. Starting from the extreme eastern end of Galveston Island, and running westward until it joins the property of the Federal Government, the sea wall is to protect the whole portion of Galveston facing the Gulf of Mexico. Built upon piling with a concrete foundation it will, it is presumed, be strong enough to resist any probable storm, while it will be of sufficient height to prevent the waters encroaching on the town as they did in 1900. It is further proposed in time to raise the level of the whole town, so as gradually to slope down from the crest of the sea wall to the bay. To further this end the Legislature of the State of Texas has remitted the taxes due to the State from Galveston for a period of seventeen years to come.

DIOCESE OF NEWCASTLE.—A commission of local clergy and laity, formed in December, 1901, by Dr. Jacob, who was then Bishop of Newcastle, have published their Report. Having regard to the great increase in the population of Tyneside and in some of the mining districts, and to the circumstance that during the past ten years the population of the county has increased by 98,000, the Commission recommend the erection, at an estimated cost of 15,000*l* (the sites excepted) of three new parish churches, and of three more new churches in existing parishes at an outlay of about 8,200*l.*; the completion, at a cost of about 6,000*l.* of three other churches; and the expenditure of 31,700*l.* in the provision of twenty-four mission churches, halls, and parochial buildings.

NEW MISSION HOUSE, BLACKFRIARS. — New headquarters for the Gordon Missionary Society are about to be erected upon a site extending over 3,100 ft. superficial, in New Bridge-street, E.C. The building will comprise suites of offices to be let to other tenants whilst the basement and upper floors will be used for the Society's warehouse, executive staff offices, board, and committee-rooms, library, and museum.

APPOINTMENT OF SANITARY OFFICERS. — The Local Government Board has sanctioned the appointments of the following sanitary inspectors: Miss J. J. Brown, in Fulham, at a salary of 100*l.*, rising by 5*l.* annually to 120*l.* per annum. Miss M. W. Richardson, in Chelsea, at a salary of 120*l.* per annum. Mr. G. J. Bridel, in Greenwich, from April 20 to October 19, 1903, with a salary at the rate of 130*l.* per annum.

MUNICIPAL BUILDINGS, CREWE.—Nineteen tenders have been received by the Crewe Town Council for the erection of new municipal buildings for the borough. The highest was over 17,000*l.* and the lowest under 15,000*l.* A committee of the whole Council have accepted the tender of Messrs. Robert Neill & Son, of Strangeways, Manchester, to erect the buildings for 14,752*l.*

THE INTERNATIONAL FIRE PREVENTION CONGRESS.—The arrangements for the impending International Fire Prevention Congress, convened by the British Fire Prevention Committee, which will be opened by the Lord Mayor on July 7, include the presentation of a number of papers by foreign authorities conversant with special sections of the subject, and among such papers as have already been accepted for consideration and discussion at this Conference are the following:—By Mr. G. Edward Atkinson, President, Boston Manufacturers' Mutual Insurance Co., U.S.A., "The Prevention of Loss by Fire in the United States of America"; by Privy Councillor J. Stübben, late President, Amalgamated Societies of German Architects and Engineers, late City Surveyor of Cologne, "Urban Fire Protection as Influenced by Street Planning and Building Regulations"; by Chief Officer Westphalen, Hamburg City Fire Brigade, "The Latest Experience in Warehouse Construction at Hamburg and Bremen"; by Professor Woolson, Columbia University, New York, "Fire-Retarding Wood"; by Chief Officer Neier, City Fire Brigade, Amsterdam, "The Necessary Development of Fire Alarm Systems"; by Professor Medem, University of Greifswald, "Spontaneous Combustion"; by Chief Officer A. Dittman, Bremen Fire Brigade, "The Influence of Fire Service on Fire Prevention"; by Chief Officer A. Goldoni, Fire Brigade, Milan, "Fire Survey and Fire Watches in Theatres"; by Mr. Gorham Dana, Inspector, Underwriters' Bureau, New England, Boston, U.S.A., "The Care of Private Fire Appliances"; by Mr. Chas. Hexamer, President, National Fire Protection Association, U.S.A., "The Principles of Fire Insurance in America"; by Mr. W. H. Stratton, Chairman of Executive, National Fire Protection Association, U.S.A., "Fire Hazards in America from an Insurance Point of View"; by Mr. W. H. Merrill, jun., the Underwriters' Laboratories, Chicago, "The Testing Principles Adopted at the National Fire Prevention Laboratory of Chicago"; by Crown Surveyor Jaffé, Berlin, "The Testing Principles Adopted at the Royal Technical Research Laboratory, Charlottenburg, and at other Fire Tests in Germany"; by Chief Officer Welsch, City Fire Brigade, Ghent, "The Necessity of Systematising Testing Operations as Based on Belgian Experience." Regarding the programme of the Congress and the arrangements made for visitors to the Metropolis, all applications should be addressed to the Hon. General Secretary, Mr. Ellis Marsland, 1, Waterloo-place, S.W.

VALUATION OF THE NEW CHRIST'S HOSPITAL.—At the last meeting of the Horsham Board of Guardians the Assessment Committee applied for the authority of the Board to appear as respondents to an appeal which had been entered to Quarter Sessions by the Governors of Christ's Hospital in respect of the assessment of their new buildings at West Horsham. The Chairman explained that the Overseers, assisted by Mr. S. Smith as valuer, had originally assessed Christ's Hospital at 11,500*l.* The Governors intimated their opinion that that was a very excessive amount, and suggested that the Guardians, to avoid any unpleasantness, should employ a first-class valuer. The Assessment Committee thereupon applied to the Surveyors' Institution to send them the names of several professional men accustomed to that kind of valuation. As a result they secured the services of Mr. A. L. Ryde, and he came and valued the place at 15,000*l.*, showing that the original assessment was really below rather than above the mark. The Guardians had an unanimous desire to avoid conflict with the Governors of Christ's Hospital, a body just come into the neighbourhood, and they would have been quite content, if the valuers could have agreed between themselves, that the matter should not be taken into Court. Mr. R. W. Headley, the Christ's Hospital valuer, and the Guardians' valuer could, however, come to no arrangement. The Board eventually authorised the Assessment Committee to enter an appearance at Quarter Sessions as respondents.

PORT OF LONDON BILL AND THE THAMES VALLEY.—The Thames Preservation League recently presented a petition to the Board of Trade asking, in connexion with the Port of London Bill now before Parliament, that the Commission which will have charge of the river below Teddington should be directed "to have regard to the amenities of the Thames and especially to the protection of the beauty of the river in the neighbourhood of Richmond." Amongst other proposals the League also suggested "That powers be conferred on the new Board—(*a*) to prevent sheep-washing; (*b*) to preserve the towpath and access to the river at all necessary points, and to secure a right of footway along the river banks; (*c*) to preserve the amenities of the Thames, to resist acts tending to impair such amenities; and to acquire compulsorily where necessary portions of the banks especially important to the enjoyment of the river; and (*d*) to acquire fisheries; and that the duty of protecting the amenities of the river be expressly imposed upon the new Board." The following reply has now been sent by the Board of Trade to the Hon. Secretaries of the League:—"Gentlemen,—I am directed by the Board of Trade to acknowledge the receipt of your memorial on behalf of the Thames Preservation League, and I am to state with regard to the suggested provision for the preservation of the amenities of the River Thames below Teddington that the Board has considered the question, but they do not think it appropriate to insert a clause with respect to the matter in the present Bill. I am to add that your memorial, so far as it relates to the upper river, will be carefully considered when the time comes for constituting a separate Board of Conservators for the Upper Thames."

AN ENGLISH CLOCK FOR CAPE COLONY.—Messrs. John Smith & Sons, Midland Clock Works, Derby, have just received an order for a large clock for the new Town Hall at Vryburg, Cape Colony. It will be supplied with all the latest improvements.

KING'S COLLEGE, LONDON.—The forty-third annual dinner of King's College will be held at the Holborn Restaurant on Monday, June 22, with the Right Hon. and Right Rev. the Lord Bishop of Exeter in the chair.

WATER SUPPLY, LYNTON.—A scheme of water purification comprising "Hastings polarite filters has been adopted by the Lynton and Lynmouth Council, and on the 24th ult. Colonel Durnford, R.E., of the Local Government Board, held an inquiry at the Town Hall into the Council's application for a loan to enable them to carry out the same. Mr. W. H. Chowins, Engineer and Surveyor to the Council, explained that the water will be conveyed direct from the river to the polarite filters, which will only occupy a space 21 ft. by 13 ft.

SHAKESPEARE'S BIRTHPLACE.—At Stratford Town Council meeting on the 12th inst. memorials were presented from various learned societies against the proposal to erect a Carnegie Free Library in close proximity to Shakespeare's birthplace in Henley-street. One society offered to purchase an old

house on the site, built a year before Shakespeare's birth, for 1,000*l.*, and restore it. The Council unanimously confirmed the committee's recommendation of the Henley-street site, and indignantly refused the offer to purchase, denying the intention to sacrifice anything historic and Shakespearian.—— A meeting of the executive committee of the trustees of Shakespeare's birthplace was held at Stratford-on-Avon on the 14th inst. The question of retaining two of the cottages presented by Mr. Andrew Carnegie was considered. The other two, being somewhat modern and uninteresting, are being taken down. By the removal of these and the stripping of internal plaster inside the others, it has been found that there is much of the original ancient timber work remaining. It is hoped that means will be found to carry out the main idea of protecting the birthplace by isolating and safeguarding from fire these two cottages, which, in their various stages of architecture, are, it is stated, undoubtedly of great interest. These cottages are of early sixteenth-century date structurally, but possess comparatively modern frontages, which will probably be restored to their original appearance. —— At a Council meeting of the British Archæological Association held on Wednesday under the chairmanship of Dr. Birch, F.S.A., Mr. Allen S. Walker, honorary correspondent of the Association, read a Report on the whole matter of the alterations in Henley-street, Stratford-on-Avon. Mr. Walker reported that three of the five cottages contained sixteenth-century timbers apparently of black oak, and of a most interesting character. These three houses, he added, had been discovered to have belonged to relatives of Shakespeare. A letter from Mr. A. Flower, Chairman of the Stratford Library Committee, inviting a representative of the Association to confer with his Committee was received, and the following resolution, proposed by Mr. George Patrick, A.R.I.B.A. (hon. secretary), and seconded by Mr. W. E. Hughes, F.R. Historical Society, was unanimously adopted: "That, having heard Mr. Allen S. Walker's account of the proposed alterations to the house of Shakespeare's cousin (known as Birch's shop), it is the opinion of this Council that it is desirable that its condition should be interfered with as little as possible, and that the removal of the brick front should not be carried out." A second resolution, relating to the two cottages belonging to the Birthplace Trustees, was also carried, and ran as follows: "That, having heard Mr. Allen S. Walker's account of the proposed alterations to the cottages belonging to the Birthplace Trustees at Stratford-on-Avon, it is the opinion of this Council that the removal of the brick fronts from the cottages adjacent to the birthplace should not be carried out." The honorary secretary was directed to send copies of the resolutions to the respective authorities.

ROMAN WALL DISCOVERED AT NEWGATE.—The demolitions on the site of the new Sessions House in the Old Bailey have resulted in the discovery at a moderate depth of an undoubted portion of the transverse thickness of the old Roman wall immediately behind "Deadman's Walk," the burial-place for executed malefactors, and in a line with the Old Bailey. It is built of "rag" or Reigate stone, with the usual courses of red tiles between, and it is in a line with the well-known course of the wall, as laid down by many old writers, and proved correct by previous discoveries.—*Daily Chronicle.*

TOLEDO CATHEDRAL TOWER.—It is stated that several large cracks have recently been noticed in the walls of the tower of Toledo Cathedral. It is feared that the tower will collapse.

CAPITAL AND LABOUR.

SUNDERLAND BUILDING TRADE DISPUTE.—The dispute between the builders and bricklayers at Sunderland has been settled, both sides having withdrawn their demands.

PRESTON PAINTERS' STRIKE.—The strike of painters for an advance of wages at Preston has been amicably arranged. The men gave notice of an advance to 9*d.* This notice expired on April 1. Since then the men have been on strike. The points at issue will be settled by arbitration.

ST. HELENS BRICKSETTERS' DISPUTE.—Judge Shand, who acted as arbitrator in the question of "walking-time," raised by the St. Helens bricksetters, has given his decision as follows:—Whereas a dispute having arisen between the St. Helens Building Trades' Employers' Association and the Operative Bricklayers' Societies with respect to the interpretation of Rule 6 of the working rules of the Operative Bricklayers in St. Helens, it became necessary to refer the question to arbitration, as provided by Rule II. of the said rules. And whereas it was mutually agreed between the said parties to refer the points at issue between them to me, Charles Lister Shand, as arbitrator, and abiding by my ruling. And whereas the points at issue were:—1. What is the meaning of the word "country" in Rule 6? 2. Are the operatives entitled to "walking time" within the Borough of St. Helens from St. Helens employers assessed by the Corporation of St. Helens? 3. Is a workman entitled to "walking-time" if he voluntarily applies for work on the job? Now, I, Charles Lister Shand, having taken upon myself the burden of this arbitration, do award and adjudge that:—1. The word "country" in Rule 6 of the working rules of the Operative Bricklayers in St. Helens means the district lying outside and beyond the boundaries of the Borough of St. Helens. 2. That the operatives are not entitled to "walking-time" within the Borough of St. Helens from St. Helens employers assessed by the Corporation of St. Helens. 3. That a workman is not entitled to "walking-time" if he voluntarily applies for work on a job. . . .

LEGAL.

ANCIENT LIGHT DISPUTE IN FINSBURY: HOME AND COLONIAL STORES V. COLLS.

THE case of the Home and Colonial Stores *v.* Colls came before the House of Lords, composed of the Lord Chancellor and Lords Shand, Davey, and Robertson, on the 15th inst., on the appeal of the defendant from a decision of the Court of Appeal reversing a decision of Mr. Justice Joyce in the Chancery Division. The case was fully reported in the *Builder* of December 8 and 29, 1900, and December 28, 1901.

The facts were shortly these:—The plaintiffs are an incorporated company having a number of shops in different parts of the country, and brought the present action to restrain the defendant from erecting a proposed building so as to obstruct the plaintiffs' ancient lights. The premises in question were the head offices of the plaintiffs, situate in Worship-street, City. The plaintiffs' building was situated at the corner of Paul-street and Worship-street, but the only part concerned in the action was the Worship-street frontage. The plaintiffs were lessees of the premises from the Ecclesiastical Commissioners. The defendant was a builder, and also lessee of premises which he was erecting on the opposite side of the road, which was about 41 ft. wide. The premises which formerly stood on the site were 19 ft. 6 in. in height, and the defendant proposed to erect a building to a height of 42 ft., which the plaintiffs said would obstruct their lights. The main question to be decided was as to the apprehended injury to the light coming to the windows on the ground floor of the plaintiffs' premises, the portion of the ground floor opposite the defendant's premises being used as an office. It consisted of a large room 11 ft. 10 in. high and of unusual depth, the back wall being upwards of 50 ft. from the Worship-street front, and it had no window nor source of natural light at the back. This room, which was used by clerks in the plaintiffs' employ, was fitted with electric light, and the result of the evidence given at the trial was that it was the custom to use the electric light in the back part of the room on most days. The windows on the ground floor were of large size, the uppermost part of each window being filled with coloured glass to a depth of 20 in. from the top, and there were wire blinds fixed at the bottom of each window. At the trial a great amount of expert evidence was given, and it was practically admitted by the plaintiffs' witnesses that the defendant's building might be raised to a height of 25 ft. from the ground without any material injury to the plaintiffs. Mr. Justice Joyce was of opinion that there was no evidence to show that any extraordinary amount of light from the Worship-street windows had been enjoyed for anything like the twenty years, and that the proposed new building of the defendant would not affect the selling or letting value of the plaintiffs' premises. He said that if erected to the proposed height of 42 ft. no part of the defendant's building would be high enough to reach any line drawn at an angle of 45 deg. to the horizon from any point in the base or sill of either of the windows in question belonging to the plaintiffs. But he thought the defendant's building would for its width of 30 ft. directly south of these windows cut off a portion of the sky area then visible from within the plaintiffs' office, and would, he thought, to some extent, necessitate the more frequent use of artificial light in the front part of the office. Apart from any question with respect to the back part of the plaintiffs' premises and to the extraordinary amount of light required therefor in the absence of illumination by artificial light, the plaintiffs' premises would still, in his lordship's opinion, after the erection of the defendant's building be well and sufficiently lighted for all ordinary purposes of occupancy as a place of business. In his lordship's opinion, the plaintiffs' premises were unusually well lighted. If, however, as the plaintiffs contended, they were always entitled to the full amount of light they then enjoyed, they would have a good cause of action, although it might be doubted whether the diminution of light to their building by the defendant's proposed building would entitle them to an injunction. The learned Judge came to the conclusion that he must follow the decision of Mr. Justice Wright in the case of Warren and Others *v* Brown (which leading case was reported in the *Builder* of August 11, 1900, and November 2 and 16, 1901), and dismissed the action with costs.

From this decision the plaintiffs appealed to the Court of Appeal, when the appeal was allowed, and a mandatory injunction granted. Hence the present appeal of the defendant.

Mr. Bray, K.C., Mr. O. Leigh Clare, and Mr. A. B. Nutter (instructed by Hyde, Tandy, Mahon, & Sayer) appeared for the defendant; Mr. Haldane, K.C., Mr. Hughes, K.C., and Mr. Vernon (instructed by Slaughter & May) for the plaintiffs.

Mr. Bray opened the case for the appellants, and said the appeal raised a question as to the nature and amount of evidence required to entitle a plaintiff to relief by way of injunction for the protection of ancient lights, and the decision by their lordships would be one of far-reaching importance. The order appealed against was made by the Court of Appeal upon a motion of appeal by the respondents here, the plaintiffs in the action, and it ordered that Mr. John Howard Colls should be perpetually restrained from erecting on the site of premises known as 44, Worship-street, Finsbury, any building in such a manner as to obstruct any of the ancient lights of the respondents, as the same were enjoyed previously to the taking down of the building which formerly stood on the site, and it was ordered, furthermore, that Mr. Colls (who was one one of the largest builders and contractors in London) should forthwith pull down all buildings on the said site which had been erected in such manner as to obstruct any of the aforesaid ancient lights, but that the operation of the mandatory part of the Order should be suspended to enable Mr. Colls to appeal to this House. The respondents were a limited company, and were entitled to the residue of a term of twenty-eight years from December 25, 1889, to a block of buildings situate on the north side of Worship-street and east side of Paul-street in the parish of St. Leonard's, Shoreditch. Worship-street ran east and west from Paul-street, and the Company's premises were about 47 ft. high from the corner block where Worship-street crossed Paul-street and Wilson-street, having a west front in Paul-street and a south front of about 150 ft. in length in Worship-street. Opposite to a portion of the south front in Worship-street of the Company's premises was the site of some buildings which had been recently removed and formerly belonged to Phillipps & Son, Ltd. The site was 36 ft. in width, and known as 44, Worship-street, and the premises that formerly stood there were 19 ft. 6 in. high, and were adjoined on the west by the Cock and Magpie public-house, which was 33 ft. high, and on the east by Phillipps & Son's buildings, which were also 33 ft. high. By an agreement dated July 11, 1900, and made between Phillipps & Son, Ltd., and the appellant, the latter agreed to pull down the existing buildings, and erect, according to approved plans, a building suitable in character to the neighbourhood, and of a warehouse class, at a cost of not less than 2,000*l.*, to be roofed by Ladyday, 1901, and the building owner agreed to grant the lessor a lease for ninety-nine years from Ladyday, 1900, at a pepper-corn rent for the first calendar months and 130*l.* for every subsequent year. Worship-street was being gradually rebuilt, and the new buildings on the south side were of a uniform height of 50 ft., while those on the north side varied from 49 ft. to 65 ft. While the appellant's building was in the course of erection, Mr. Willey, the Company's surveyor, wrote to the appellant that the Company had raised a question of the serious diminution of light that would be caused by the new buildings, and a suggestion of compensation which the appellant offered to discuss not proving acceptable he was served with the writ in this action on August 17, 1900. When the action was tried before Mr. Justice Joyce in December, 1900, it had been laid down by Mr. Justice Wright in Warren *v.* Brown [1900] 2 Q.B. 772, that the owner or occupier of a house had no legal right of action, so long as he had left to him as much light as was ordinarily required for habitation or business, even though he had been deprived of a substantial amount of light and had thereby suffered substantial damage.

The Lord Chancellor: That shortly is the proposition you invite us to hold as good law.

Mr. Bray: Yes, my Lord; that is what my contention here is.

The Lord Chancellor: Unfortunately for you that decision has since then been reversed by the Court of Appeal, who held that the true rule of law with reference to the interference with ancient lights was, I see, this:—"If ancient lights are interfered with substantially, and real damage thereby ensues to the tenant or owner, then that tenant or owner is entitled to relief."

Mr. Bray: I do not quarrel with that rule of law, but I say, not relief by injunction, but by compensation, and I have several reasons for saying so.

The Lord Chancellor: Then may we hear those reasons now?

Mr. Bray thereupon pointed out that according to the law of England the owner of ancient lights was not entitled to all the light which had in fact reached his windows, but was entitled only to such an amount as was sufficient according to the ordinary notions of mankind for the comfortable use and enjoyment of his tenancy for any purpose for which it might reasonably be considered available, or, alternatively, to a sufficient quantity of light for all ordinary purposes of inhabitancy or business.

Lord Davey: Where a man, by reason of his carrying on a trade of particular delicacy, is deprived of some of his light, you would not say he could complain if sufficient light were left for ordinary trade purposes?

Mr. Bray: Certainly not; that has been so held. Continuing, the learned counsel said that was not the case here. The evidence was that after the new buildings are erected the ordinary amount of light will still reach the respondent's windows. That brought him to his second ground of appeal—namely, that in this case the respondents had not discharged the onus of proving that if the appellant were allowed to erect their building as proposed their premises would not derive sufficient light for all ordinary purposes. All the respondents proved was that the light was lessened; that was not enough. The appellant proved that when the building was erected, an angle of 51 deg. of light taken at the centre of the windows in question, and of 47 deg. taken at the sill, was still left, and therefore, assuming that the respondents' premises would continue to be used as now they were used, the respondents had sustained no damage. In cases where a new building left 45 deg. of light architects and surveyors thought that was sufficient. That, no doubt, was a "rule of thumb," but it was held to be "a good working rule." Before the respondents had to use artificial light, thus showing that they did not formerly enjoy any extraordinary amount of light. Then it became a question of a damage, if any, to a legal right—an easement simply—and that was capable of being estimated in money. The damage could be compensated for by a money payment, and the respondents' claim to an injunction ought not to be granted, because it was oppressive, and there was an alternative remedy open to them. It was very important to note the evidence which was given at the trial by experts on this question of light, which went conclusively to show that by the erection of the new buildings neither the selling nor the letting value of the company's premises would be affected adversely. The learned council having dealt with the numerous authorities cited in the Court of Appeal, and with the evidence as to damage, Mr. Clare followed on the same side.

Mr. Haldane, K.C., then addressed their lordships for the respondents. In this case the damage that the respondents would suffer would be substantial, and, therefore, the injunction granted by the Court of Appeal should stand. There was no rule of law, no rule of evidence, and no presumption or inference of fact, except, perhaps, of the very slightest kind, that where the angular height of an erection was less than 45 deg. the course of light would not be seriously interfered with. There might be an alternative remedy in compensation sometimes, but here the respondents were free to decline compensation, because the damage would be done and the nuisance to them could not be abated by the payment of a sum of money. The Court had no power to compel them to sell their property or their right to the appellant, who had no statutory claim to what he desired to make them part with. It was a legal right that the respondents enjoyed—a right fixed by the Prescription Act, and was absolute and indefeasible.

The learned counsel was still speaking when the further hearing was adjourned till Friday.

POINT UNDER MICHAEL ANGELO TAYLOR'S ACT.

THE case of Winsborrow *v.* The London Joint Stock Bank came before a Divisional Court of King's Bench, composed of the Lord Chief Justice, Mr. Justice Wills, and Mr. Justice Channell, on the 15th inst., on the appeal of Mr. E. J. Winsborrow, assistant to the engineer and surveyor of the City of Westminster, from a decision of the Westminster Police Court magistrate, dismissing a summons preferred against the respondents, the London Joint Stock Bank under Section 65 of the Metropolitan Paving Act of 1817, commonly known as Michael Angelo Taylor's Act, which prohibited any person from hanging out or exposing "any meat or offal or any other matter or thing whatsoever from any house."

The facts were these: In February, 1899, the Bank had had attached to their premises at the corner of Victoria-street and New Tothill-street, and facing the latter thoroughfare, three reflector lights for the purpose of improving the lighting of some of their rooms. As these lights overhung the pavement, the appellants' contention was that they came within the section of the Act, and took proceedings against the bank. At the police-court two points were taken on behalf of the bank, the first being that the reflector lights were not matters or things within the meaning of the section; the second being that as they had been fixed since February, 1899, the prosecution was barred under the Summary Jurisdiction Act of 1848. The magistrate decided the first point in favour of the bank, and held that the lights did not come within the Act. On that ground, therefore, he dismissed the summons. The second point as to time, he decided in favour of the appellant. Hence the present appeal.

At the conclusion of the arguments of counsel, the Lord Chief Justice, in giving judgment, said that the appeal must be dismissed. He thought it would be a contradiction in terms to speak of these reflectors as being hung out of houses, and the Section only referred to temporary or movable things, which might be unsightly, obstructive, or inconvenient. There were other provisions dealing with the question of nuisance.

Justices Wills and Channell concurred.

Mr. Horace Avory, K.C., and Mr. Bodkin appeared for the appellant; and Mr. Macmorran, K.C., and Mr. Hugh Fraser for the respondents.

POINT UNDER THE LONDON BUILDING ACT, 1894.

THE case of Goodchild *v.* Matthews came before a Divisional Court of Kings Bench, composed of the Lord Chief Justice, Mr. Justice Wills, and Mr. Justice Channell, on the 14th inst., on the appeal of the District Surveyor for North Islington and East St. Pancras from a decision of the stipendiary sitting at the Marylebone Police-court.

The facts were shortly these:—The respondent, a builder, wishing to erect six blocks of flats in West Hill, St. Pancras, gave the District Surveyor the requisite notice under Section 150 of the London Building Act, 1894. The Surveyor served a notice of objection, alleging that the proposed buildings would be a contravention of Section 77, Sub-Section 1, which enacts that buildings shall not be united except where they are wholly in one occupation or are constructed or adapted to be so. The magistrate found as a fact that each of the blocks contained its own staircase leading from the basement to the top, and had a separate entrance from outside, and that there was a passage under the roofs leading from one end of the blocks to the other. The plans disclosed that the walls dividing the blocks were of the necessary thickness to satisfy the requirements of the Act, and were not carried up through the roof. The surveyor's case was that each of these blocks was a separate building, and that the builder was proposing to unite them by means of the corridor in contravention of Section 77, Sub-Section 1 of the Act. The builder, however, contended that the whole was a single building containing several sets of flats which, though separate dwellings, were not separate buildings. The magistrate held that the building proposed to be erected by the respondent was one separate building, and not an union of separate buildings under one roof, and that Section 77, Sub-Section 1, only applied to the union of buildings which had in the first instance been completely erected as separate structures, and that it did not apply to the union of separate buildings in course of erection for the purpose of transforming them into a single separate structure. From this decision the District Surveyor now appealed.

The Lord Chief, in giving judgment after hearing the arguments of counsel, held that the finding of the magistrate was justified by the evidence. Reserving to himself the right to change his opinion when the point again arose, he thought that Section 77, Sub-Section 1, of the Act referred to the union of two buildings existing at the time of the union, and not to an addition to an existing structure. He thought the appeal should be dismissed.

Justices Wills and Channell concurred.

Leave to appeal was granted.

Mr. Horace Avory, K.C., and Mr. F. F. Daldy appeared for the appellant; and Mr. Macmorran, K.C., and Mr. Craies for the respondent.

CLAIM AGAINST CEMENT MERCHANTS.

THE case of Reece *v.* Charles Nelson & Co., Ltd.' came before Mr. Justice Grantham, sitting without a jury, in the King's Bench Division on the 18th inst.

Mr. Horace Avory, K.C., and Mr. Hudson appeared as counsel for the plaintiff, and Mr. McCall, K.C., and Mr. Cranstoun for the defendants.

Mr. Hudson, in opening the plaintiff's case, said the action was brought by the plaintiff, a master plasterer, against the defendants, who are cement manufacturers and merchants, for damages for alleged breach of warranty expressed and implied, with reference to certain cement supplied by defendants to plaintiff. The plaintiff was a sub-contractor under some builders named Harris & Co., who were building a new medical ward in the Poplar Hospital, the plaintiff having to do the plastering work there, with a particular cement called Selenitic Blue Lias Cement, manufactured by the defendants. Mr. Plumb, the architect for the work, specified that this particular cement was to be used on the job by the contractors. A Mr. Mummery was the assistant of Mr. Plumb, and this gentleman had charge of the work. On December 4, 1901, the plaintiff went to the defendants' place of business for the purpose of ascertaining the price of their cement, and after the price was arranged defendants handed to plaintiff certain printed instructions showing how the cement was to be used. In due course a quantity of the cement was delivered by the defendants to the plaintiff, and the plaintiff used it for the purpose of plastering the walls of the hospital. After it had been done some time the walls began to blister under the staircase and afterwards extended to the walls. The architect called the attention of the builders to it and the builders communicated with the plaintiff and the matter was then looked into. There were some meetings on the work between the architect and his representative, the cement merchants, the builders, and Mr. Reece. On June 14, there was a full discussion with regard to the cement. The walls were examined, the little holes—the places where the blisters had occurred—were examined, and then it was found that there was a little speck inside the place where the blister occurred. That was found to be in the first coat of plaster. There were two coats of plaster, the first a rough coat, and the second a finishing coat, and it was found that the specks were in the under coat. It was then decided that a Mr. Finney, the clerk of the works, should examine it to see what was the cause of the specks. Finney made some experiments and found that there were some small portions or particles of the cement which had not been properly burnt. He sifted a lot of the cement, and Mr. Mummery would produce the siftings. The plaintiff's workmen were then directed to plaster the walls of a stoke-hole with some of the cement. Two coats were put on and then it was found that it blistered in the same way as it had done in the hospital. Then a meeting was called, at which practically every one interested was present. Another test was then applied, which was more conclusive still. The defendants were asked to bring some more cement out of their works, and they brought some in a cigar-box. The clerk of the works, in the presence of Mr. Mummery, sifted the cement from the cigar-box, and it was then found that a residue was left. He then put this residue into a damp cloth and frequently dipped it in water, when it was found that it never slaked at all, showing conclusively that the cement had not been properly burnt, or kept at the works a sufficient time before being sent out. At that meeting Mr. Mummery understood that defendants admitted that there must be something wrong with the manufacture of the cement at their works, because it was then left to the architect to say what should be done under the circumstances, and plaintiff's witnesses would say that they were under the impression that the defendants quite accepted the responsibility, because their representative made the remark that it was to be hoped it would be remembered that their pockets were not too deep. The plaintiff naturally thought that that settled the matter. Subsequently the damage was rectified, partly by the builders and partly by the plaintiff. On plaintiff applying to defendants for payment of the money it cost, they repudiated all responsibility, and said that the defect, if there was a defect, arose from the lime putty which had been used. In the first coat of plaster there was no extraneous material, so that there could be no dispute as to the preparation of that. In the second coat there was a certain proportion of lime putty used, which the plaintiff supplied, and which was not supplied by the defendants at all. He (counsel) should be able to show his lordship from the evidence that the defendants' directions as to the preparation of the stuff were carried out to the letter. The clerk of the works supervised it very closely, and the plaintiff took every possible precaution in the matter. He thought he should be able to dispose of the suggestion that the defect arose through the lime putty.

Mr. Martin Reece, the plaintiff in the action, was then called and substantially bore out the statement of his counsel. He said he had taken every precaution to insure that the defendants' printed instructions were carried out. He used to visit the work practically every day. There was nothing wrong with the lime putty. After applying the first coat of plaster they had to wait a week or nine days before putting on the finishing coat, owing to the weather. The builders debited him with 115*l.* 11s. 10d. in respect of this matter. The builders stopped that amount out of moneys due to him from them. He traced the specks into the under coat of the cement.

Cross-examined by Mr. McCall:

He had never used the defendants' Selenitic Blue Lias Cement before, and he never wanted to use it again. The selenitic cement supplied by the defendants was used both on the walls and on the ceilings of the hospital. Substantially there was no complaint as to the ceilings. That was, however, due to their using a considerable amount of lime and hair, which was not used on the walls. The blistering was due to a small particle of unslaked lime which must at some time have got through the mesh of the sieve. As far as he was able to judge, the mischief was in the backing coat. He did not understand that all along the defendants had said that it was in the facing coat and not in the backing coat. For the backing coat he used a finer sieve than that prescribed by defendants, and even that did not prevent the particles getting through. Mr. Blythe, the defendants' representative at the meeting, said that he would admit there was something wrong with the cement and that he would see about it the moment he got back to the works. He said something about bearing the loss, if loss there was. He said, "I suppose we shall have to bear the cost; but bear in mind our pockets are not too deep." Over the whole of the work about 4,500 yards super were plastered with the defendants' plaster. Not more than 3,288 yards of that was subject to blisters.

Mr. Finney, examined, said he was clerk of the works to the Poplar Hospital job. He supervised the mixing of the cement from time to time. The defendants' instructions were carried out strictly to

the letter while he was there. In the second coat of plaster in the experiments he made he did not use lime putty at all. Both the coats blistered as they had done in the hospital. The conclusion he came to was that the selenitic had not been sufficiently burnt.

Mr. John Holter, examined by Mr. Avory, said he was foreman plasterer in the service of the plaintiff, and had acted as general foreman of the plastering work at the hospital. He had heard the evidence given by the previous witnesses and agreed with it. The mixing was done in accordance with the directions of the defendants.

Mr. Mummery, examined by Mr. Avory, said he was the architect's assistant on the work. The evidence given by the previous witnesses was substantially correct.

Mr. Wm. Millar, examined by Mr. Avory, said he was an expert in cement, and had been in practice for thirty-seven years in that line. He had several qualifications for that purpose. He had examined the blisters on the walls of the hospital ward. Inside the blister was a dark speck, and the dark speck was improperly calcined blue lias lime.

This being the plaintiff's case, Mr. McCall said he would call his evidence before addressing his lordship.

Accordingly, Mr. G B. Blythe, examined by Mr. McCall, said he was the managing director of the defendant company. In the manufacture of selenitic blue lias lime it was impossible, if properly treated, for any particles which would cause any damage in the plastering to get through the sieves. He had supplied the same material that he supplied the plaintiff with to other customers, and had had no other complaints. He had examined the walls of the hospital and found many blisters. In his opinion, the whole of the blisters were in the finishing coat. He had never said to Mr. Plumb or anybody else that defendants would bear the cost of repairing what had taken place, but he had said that if the damage was caused by their bad material they would bear the cost. He did not admit that the fault was in their stuff.

Mr. Arthur William Ewins Cale examined, said he was the manager of the defendants' works at South Wharf, Paddington. Clods were caused through the improper mixing of the selenitic. In his opinion the blisters were in the finishing coat.

Mr. Bickley, examined, said he had a large experience in plastering work generally. For many years he had used selenitic manufactured by defendants. He had inspected the work at the hospital, and had tested several of the blisters. He was of opinion that they were caused in the facing coat.

At this stage the further hearing of the case was adjourned, the learned Judge having to attend at the Old Bailey during the remainder of the week.

THE NEWCASTLE ANCIENT LIGHTS CASE.

MR. JUSTICE BUCKLEY, in the Chancery Division on the 19th inst., delivered a considered judgment in the case of Cowper *v.* Laidler on the question of whether the plaintiff's remedy in respect of infringement by the defendant of ancient lights to a cottage belonging to plaintiff in Dove-lane, Newcastle-on-Tyne, should be an injunction or damages. The case was reported in our last issue.

In giving judgment, his Lordship said he had already found as a fact that the access of light over the defendant's property to certain ancient lights of the plaintiff—namely, a ground-floor window and a dormer window in the south wall of the plaintiff's cottage as theretofore enjoyed—would be substantially and materially interfered with by the defendant's proposed buildings. The defendant's buildings were not yet erected, and the injunction asked for was, therefore, prohibitory, not mandatory. The question on which he had reserved judgment was whether damages could be, or under the circumstances ought to be, given to the plaintiff instead of an injunction. By Lord Cairns's Act, when a mandatory injunction was asked for, the Court had jurisdiction to substitute damages for an injunction. Secondly, when an injunction was asked for to restrain a continuing nuisance—that was, where the act had been done—and there was an intention to continue to do it, then it seemed by the cases there would be jurisdiction to grant damages instead of an injunction. Thirdly, where no wrongful act had been committed, but an injunction was asked for to restrain its commission, the Court of Appeal had expressed a clear opinion that Lord Cairns's Act contained no power to give damages in lieu of an injunction. In a later case, however, the Court of Appeal had said that the question whether the Court had jurisdiction to award damages by way of compensation for an injury not yet committed, and only threatened or intended, was not free from difficulty. A prescriptive right to light was a legal right, and it was a matter of property. When a plaintiff had established his legal right to it, unless there was something special in the case, he was entitled to an injunction to prevent its violation. The plaintiff's easement to light was an easement at common law. The plaintiff was entitled to an injunction, not in the discretion of the Court, but as a matter of course, unless there was something special in the case, such as *laches*, or where the interference with the light was only trivial. The Court had affirmed over and over again the view that the jurisdiction to give damages, where it existed, was not to be used to enable a defendant to purchase from the plaintiff his legal right to an easement. The Court had no right to compel the plaintiff to part with his easement for money. It had been held in cases where the injury was trivial, and the damage could be measured by a small sum—20*l.* in one case and 5*l.* or 6*l.* in the other—the Court might, where there was jurisdiction, give damages in lieu of an injunction, but, except in such a case, the owner of a legal right to an easement was entitled to an injunction. In the present case the circumstances upon which the defendant relied were that the property in Northumberland-street was much more valuable than the comparatively insignificant property in the lane at the back, and the plaintiff purchased the cottage because he knew that it would become more valuable in relation to the adjoining property. The defendant had given no evidence, and it was not suggested, his Lordship thought, that the damage the plaintiff would suffer would be 20*l.* or any small sum of that kind. He (his Lordship) found, as a fact, that the damage would be substantial. The defendant said that the plaintiff's cottage property was worth comparatively only a small sum, and that the plaintiff was extorting money by asking for an injunction, and thus compelling him to either buy at an unreasonable price or keep his buildings down. That argument was a fallacy. It was not extorting money to ask a price for property which for special reasons could command an exceptional price. When a neighbour required property for his own purposes he must submit to pay a fancy price for it. When the defendant bought, as he did subject to the plaintiff's easement, he presumably paid less for his property than he would have done if the easement did not exist. The value of the plaintiff's property was not merely the value of the cottage, but such sum as it would fetch having regard to the easement of light, and a price which, having regard to the exigencies of the neighbouring property, it would command. He was of opinion that this was not a case where the course of giving damages in lieu of an injunction ought to be taken. He thought the plaintiff was entitled to an injunction, and he granted an injunction in the usual form, restraining the defendant from erecting any buildings so as to darken or obstruct the plaintiff's right to light as theretofore enjoyed. The plaintiff had also claimed a right to light to a skylight, but the evidence was insufficient for him to determine whether it was an ancient light or not. It was not, however, necessary for him to determine that question, because the injunction with respect to the other lights would protect the skylight. He had already dismissed the action with regard to the disputed room. The other relief asked for by the statement of claim had not been pressed, and he made no order with respect to it. He also made no order as to costs.

Judgment accordingly.

LIBEL ACTION BETWEEN BUILDERS.

THE case of Dandridge *v.* Hayles came before the Court of Appeal, composed of the Master of the Rolls and Lords Justices Stirling and Mathew, on the 19th inst. on the application of defendant for judgment or new trial on appeal from verdict and judgment entered at the trial before Mr. Justice Ridley and a special jury in the King's Bench Division. The case was reported in the *Builder* of January 24 last.

This was an action by the plaintiff, a builder and contractor, against the defendant, also a builder and contractor (both carrying on business at Shanklin, Isle of Wight), to recover damages for libel. The case for the plaintiff, Francis Dandridge, was that in April, 1900, the Sandown Urban District Council decided to have Wilton-road, Shanklin, in which the defendant, George Hayles, resided and owned property, sewered, levelled, metalled, and put into proper repair. Plaintiff tendered for the work and obtained the contract, which was, he said, properly carried out under the supervision of the Surveyor of the District Council and his clerk of the works. While it was proceeding the defendant wrote a letter to the District Council containing the words complained of, in which he imputed that the contract was being carried out in a "barefaced scamping manner," and complained of a deficiency of ballast, &c. The Town Council inquired, and found the complaint was groundless, but the defendant still persisted in his allegation, and resisted the payment of his proportion of the cost as frontager on the ground that the work was not properly executed. He was, however, ordered to pay the amount to which he was assessed by the magistrates, and on appeal to the King's Bench Division was unsuccessful. The letter was read out at the Council meeting and made public, and had, plaintiff said, done him a great deal of injury, and, therefore, he brought the present action. The defendant pleaded that he wrote the letter bonâ-fide as a rate-payer and frontager, and that, therefore, it was privileged. In the result, the jury awarded the plaintiff 50*l.* damages, and judgment was entered accordingly. Hence the present appeal of the defendant.

Mr. Montagu Lush, K.C., and Mr. Marriott appeared as counsel for the appellant, and Sir Arthur Collins, K.C., and Mr. Turrell for the respondent.

During the course of the arguments of counsel a suggestion came from the Bench that the parties should endeavour to arrive at a settlement of the dispute.

After some discussion it was arranged that the appeal should stand over in order that the parties might endeavour to come to some arrangement.

Order accordingly.

THE WORKMEN'S COMPENSATION ACT: WHAT IS A WAREHOUSE?

AT the Southwark County Court, on Monday, his Honour Judge Addison, K.C., heard a claim under the Workmen's Compensation Act by Frederick Charles Green, a labourer, against Messrs. Britten & Gilson, glass and colour merchants, builders' merchants, drysalters, &c., of 180, Union-street, Borough. Mr. O'Connor was counsel for the applicant, and Mr. Shakespeare for the defendants. Mr. O'Connor said the only point in the case was as to whether the respondents' premises where the applicant met with permanent injury was a warehouse within the meaning of the Act. The defendants had what might be termed a shop in Union-street, in which they did principally a wholesale trade. Behind the shop were two arches, one of which was used as a warehouse for the storage of crates of glass, and the other as a glazing and lead-glass shop. On December 8 the applicant was at work in the arch where the glass was stored, when some crates fell upon him and he was permanently injured. The goods in the warehouse were never broken in bulk but were sold as they were imported, to builders and others. Any retail business was done in the front shop, which was quite detached, and that shop was supplied in bulk from the warehouse. The goods when sold were taken direct from the warehouse in the respondent's own vans and not from the shop. The applicant said he had been in the respondent's service sixteen years, eight years of which he acted as a warehouseman. The warehouse where the accident occurred was always called by employees and others "the warehouse." From 400 to 500 cases of glass were generally stored in "the warehouse."

Cross-examined, the applicant said that there was underground communication between the front shop and "the warehouse."

Other witnesses gave evidence that the building was popularly recognised as a warehouse. Mr. Shakespeare submitted that both on the construction of the Act and on the authorities the building did not constitute a "warehouse," because it was only a place used for keeping goods necessary for carrying on the wholesale and retail business of oil and colour merchants, &c. Whatever a "warehouse" might be within the meaning of the Act, it was not a place where goods were stored for the purpose of supplying a business other than that of the business of a warehouseman.—His Honour: Your point, I take it, is that a "warehouse" is a place where goods are warehoused only, and not as auxiliary to the carrying on of a business?—Mr. Shakespeare: Yes, your Honour.—Continuing, Mr. Shakespeare said that another point was that, under Section 7 of the Act, it was stated that a factory had the same meaning as in the Factory and Workshops Act. A warehouse whatever it meant in the Factory Act meant something other than a workshop. Both warehouses and workshops were dealt with, and presumably they meant different things. On the evidence it was clear that the whole of the respondent's premises, seeing that there was intercommunication, were workshops within the meaning of the Factory Act, and as a workshop meant something different from a warehouse, *prima facie* the arch in which the accident happened was not a warehouse.—His Honour: I should not decide the case on that point, because I can conceive of many warehouses where a great many operations are carried on, but yet are essentially warehouses. Reverting to his first point, Mr. Shakespeare said there were only two cases to guide them. In one, Burn *v.* Whiteley, it was held that a place where goods were stored for the purpose of supplying retail shops was auxiliary to the business and did not constitute a warehouse. In Hunt *v.* Grantham it was decided, too, that a storeroom was not a warehouse because it was auxiliary to some other business, which was not a warehousing business.—Mr. O'Connor said he agreed that the Court of Appeal had laid it down that a storeroom for the purpose of supplying a retail business was not a warehouse; but the goods kept in the arch in question were not stored there merely for supplying the respondent's shop, but for being dealt with wholesale. It was a separate building, and the business was really separate and distinct from the shop. In Willmot *v.* Paton it was held that an uncovered space on which old iron was broken up and kept until sold was a warehouse. — Mr. Shakespeare retorted that that was because the County Court Judge did not happen to send up certain facts, and, therefore, the case went off on a technicality.—His Honour, in giving judgment, said he was obliged to find that the arch was used as auxiliary to the respondents' business. They merely supplied from it

the orders they obtained, either by travellers or by means of correspondence, or some other way, and the place was, therefore, not a "warehouse" in the sense in which that Act required. Upon the second point he should find against the respondents, as he was not at all satisfied with the contention that a workshop could not also be a warehouse. He made an award in the respondents' favour with costs, but fixed the applicant's compensation at 12s. per week during incapacity, in case his decision was reversed on appeal. That course would save the parties coming back to the court.—Judgment was entered accordingly, Mr. O'Connor giving notice of appeal.

THE NEW STREET FROM HOLBORN TO THE STRAND.

THE case of the King *v.* The High Bailiff of Westminster (*ex parte* the London County Council) came before a Divisional Court of King's Bench, composed of the Lord Chief Justice and Justices Wills and Channell, on the 20th inst., for argument on a rule *nisi*, obtained by the Council, calling on the High Bailiff of Westminster to show cause why a writ of mandamus should not issue commanding him to summon a jury to determine the sum to be paid by the Council to the claimants Elizabeth S. Burgis and Jane Croft for the purchase of their interest in 19, Vere-street, St. Clement Danes, and for loss and damage in consequence of the taking of the premises under the London County Council (Improvements) Act, 1899, the Act which empowers the Council to make a new street from Holborn to the Strand, and other street improvements.

It appeared that on March 4, 1902, the claimants received from the County Council a notice to treat and in that notice the Council claimed that the premises were in an insanitary condition under Section 20 of the Act of 1899, which enacts that in the event of such claim on the occasion of assessing the compensation the court or other person settling the same shall determine whether such lands fall wholly or in part within that description. In the event of their so deciding then in assessing the compensation that certain evidence shall be receivable, and if the court or person should be satisfied by such evidence then the purchase-money should be assessed under Section 21 of the Housing of the Working Classes Act, 1890. The claimants on March 27, 1902, served on the Council a notice of claim under Section 12 of the Act of 1899, and on November 5, 1902, the Council delivered to the claimants a sealed offer of 1,600*l.* under Section 38 of the Lands Clauses Act, 1845. On November 18, 1902, the claimants refused the offer, and on November 22 the Council issued a warrant to the High Bailiff to summon a special jury. The jury found that the premises in question were insanitary, and then the claimants said they would accept the sealed offer. The Council contended, however, that it was too late for the claimants to accept the sealed offer; but the Deputy-Bailiff held that the claimants could accept it, and discharged the jury without their having returned a verdict as to the amount of compensation. The County Council then obtained the present rule.

Mr. Danckwerts, K.C. (with him Mr. R. C. Glen) in showing cause against the rule, contended that the claimants could accept the offer at any time up to the verdict.

Mr. Dickins, K.C. (with him Mr. Corrie Grant), for the Council in support of the rule, submitted that the claimants could only accept the offer within the ten days prescribed by Section 38 of the Lands Clauses Act of 1845.

In the result their lordships held that it was open to the claimants to accept the offer at any time up to verdict, and discharged the rule.

PATENTS OF THE WEEK:

APPLICATIONS PUBLISHED.*

9,580 of 1902.—W. CROOKALL and R. ARMSTRONG: *Fastenings for Windows.*

A door or window fastener consisting in the combination of a pillar having several recesses therein and a catch movable on a pivot or in a slide, and adapted to engage with any of the recesses in the pillar.

9,715 of 1902.—T. B. HITCHMAN: *Screw Nail.*

A nail or screw the head of which carries or forms one or more projections adapted to form and act as a part or parts, or segment or segments, of the thread of a screw.

9,724 of 1902.—C. HARVEY and W. PADDOCK: *Indicators for Use in connexion with Storage Tanks.*

An appliance for indicating the level of liquids in petrol and like storage tanks and other vessels, consisting of a helical blade freely supported within the interior of the tank or vessel connected with a pointer which works over an external dial, and a float which rises and falls with the contained liquid, and is provided with a screw box at its equivalent, through which the helical blade is directed, said float being constrained by suitable guides to rise and fall without rotating, and to impart a corresponding rotary movement to the said blade and pointer, so that the position of the said pointer with respect to the dial will indicate at a glance the quantity of liquid contained in the tank.

9,749 of 1902.—J. W. EWART and G. H. EWART: *Gas-Regulating Valves for Use with Water Heaters.*

A gas and water regulating valve for use with water heaters, consisting in the combination of a box or chamber having gas inlet and outlet tubes, of a valve for closing the gas outlet tube, and of a spindle which extends through the chamber and carries the gas-valve inside the chamber and a water-valve outside the chamber, the said water valve being so arranged that on the water supply being turned on it turns the spindle, and so raises the gas-supply valve, and closes the same on the water supply being interrupted.

10,443 of 1902.—E. A. SACHET and J. C. SANDERSON and G. B. BETTS: *Combined Window-sash Fasteners and Roller-blind Supporters.*

This consists in adjusting and locking a window sash by means of a rod attached thereto, and a screw clamp having a lateral opening adapted to receive a reduced portion of the rod, the socket of said clamp having a mouth of less width than the diameter of the main portion of the rod.

14,070 of 1902.—W. NOCK and TONKS, LTD.: *Rising Butt Hinges.*

A rising butt hinge, consisting in the combination of two pairs of spirally inclined bearing surfaces in or on the knuckles of the hinge, preferably one pair at top and the other pair at bottom, the two pairs of spirally inclined bearing surfaces having the same inclination as each other.

16,676 of 1902.—F. STANSFIELD: *Door Fasteners.*

This consists in the combination with a handle, latch, or turn-button of a door with an automatic dial and means for actuating the same so as to indicate visibly whether the said door is securely fastened or otherwise.

16,933 of 1902.—L. KNOCHE. DR. M. ISSLUB: *Manufacture of Varnish, Paint, or the Like.*

A process for the manufacture of varnish, paint, or the like, according to which naphthaline is dissolved in a raw or boiled linseed oil under addition of β-naphthol.

3,291 of 1903.—W. S. STURGES: *Window Sashes.*

In window frames and sashes the combination with plates or strips furnished with holes or perforations secured to the sides of the sashes, of spring catches secured to the sides of the frame and adapted to engage the said holes or perforations.

4,241 of 1903.—F. GUILLEAUME: *Water-closets.*

This consists of a hinged seat for a water-closet which is hinged to a lug integral with the pan by means of two short arms formed upon it, the said seat being held in its raised position by means of these arms, and of two projections formed upon the closet pan or upon the arms themselves.

4,709 of 1903.—J. BARR: *Electrically Driven Vertical Saw Frames for Cutting Wood.*

This consists of electrically driven saw frames for cutting wood, wherein the electric motor is placed overhead free from the sawdust falling from the log or deals being sawn.

4,762 of 1903.—M. MERKER: *Door Closers.*

A door closer in which cheeks are provided with brake shoes and pressed by springs against the walls of the casing, and are pivoted to a horizontal disc adapted to rotate with the closing lever and slide on the said walls with slight friction during the opening of the door, but bear powerfully against the said walls during the closing of the door.

12,796 of 1902.—J. Y. JOHNSON: *Manufacture of Ceramic or Earthenware Masses or Articles.*

The manufacture or production of ceramic or earthenware masses or articles, by burning a mixture of aluminium oxide, and a plastic material, such as clay or the like.

13,616 of 1902.—E. J. EASON: *Siphon Used Traps in Connexion with the Drainage of Water and Other Liquids.*

An apparatus for application to ordinary siphon traps made for preventing foul air or gas from rising through pipes used for draining away water or liquid of any kind, and which may be applied in such manner that the interior of the siphon trap may be at all times fully accessible for examination, inspection, cleaning, and repairing.

25,593 of 1902.—G. LIND: *Apparatus for Plastering Walls, Ceilings, and the Like.*

Apparatus for plastering walls comprising pressure-producing means in place of the scout wheel, this pressure-producing means being controlled by a weighted lever which serves to force the plastering material against the wall through one or two delivery openings, an upper opening and a lower opening.

25,760 of 1902.—PARKINSON, and W. & B. COWAN, LTD., and A. G. CHUBB: *Lighting Attachments for Gas Street Lamps and Other Gas Burners for Illuminating and Heating Purposes.*

Lighting attachments for the burners of gas street lamps wherein an explosive mixture of gas and air is formed and exploded within a tube or equivalent device, which conducts the flash or flame created by said explosion to the region of the burner for directly or indirectly igniting the gas issuing therefrom.

26,852 of 1902.—J. H. W. SIRINGFELLOW and F. N. MAINETTY: *Compositions Applicable as Varnishes or the Like, and as a Cement or Filling for Painters' Use.*

The production of a transparent varnish especially adapted for the preservation from oxidation of iron, steel, and other metals, which is produced by means of a solvent composed preferably of an oil or petroleum, and an oleaginous crude turpentine, which solvent is used to dissolve a resin or resinoidal ingredient.

28,731 of 1902.—W. OATES: *Conduits or Carriers for Electric Cables.*

A conduit or carrier for electric cables, the ducts of which are each provided with a narrow longitudinal opening from end to end of each length, communicating with a separate draining channel.

983 of 1903.—H. SIEGWART: *Cores or Formers for Use in the Manufacture of Hollow Girders or Structures.*

A core or former for use in moulding or casting hollow structures from plastic material, comprising a former in two longitudinal parts constituted by several plates flexibly jointed together, the connexion of the two longitudinal parts consisting of a resilient sheet which, in connexion with other longitudinal joints in the two parts, enables, upon the operation of a device for inwardly moving or collapsing the longitudinal parts, a contraction of the circumference of the former.

984 of 1903.—H. SIEGWART: *Apparatus for Cutting Beams, Girders, and Other Structures, particularly to those made of Artificial Stone.*

An apparatus for cutting beams, girders, and other structures, comprising two cutters arranged in line with each other above the structure to be cut, which cutters are moved during operation towards each other and obliquely through the structure to be cut.

3,308 of 1903.—O. IMRAY (The Carborundrum Co.): *Manufacture of Refractory Articles, such as Bricks, Blocks, or Crucibles.*

Articles composed of a baked mixture of a refractory material such as silica, chrome ore, or magnesite mixed with carborundrum.

5,514 of 1903.—H. GRIMSHAW: *Method of and Device for Charging Water in Flushing Tanks or the Like with a Disinfectant.*

The method of charging or impregnating water in a flushing tank, by the slow dissolution of a solid disinfectant contained within a case or receptacle placed or suspended in the tank.

11,974 of 1902.—W. MCLAREN: *Ventilators.*

A ventilator comprising a pipe or socket open at both ends, and a double conical convex hood or shield fitted over the upper end of the pipe or socket, and provided with an opening on the under side of each end.

10,966 of 1902.—J. ARNOLD: *Combined Fresh-air Inlet and Foul-air Extraction Apparatus for Buildings.*

The apparatus consists of a box or case having open ends, with flaps hinged reversely at said ends to open to an equal space internally and externally for the admission of fresh air, and by reversing the flaps to extract foul air, the said flaps being caused to work by a double crank fixed on an axle or pivot, and the said flaps having sides or cheeks and the openings formed thereby having a perforated covering.

1,369 of 1902.—F. MOUNTFORD: *Automatic Machinery or Apparatus for Decorating and Glazing Tiles and Other Similar Articles of Pottery-ware, Glass, Metal, and Other Substances.*

A machine for decorating or glazing tiles and other similar articles of pottery-ware, glass, metal, and other objects, characterised by a bed or frame carrying a central shaft, a tile-carrying frame capable of having a rising-and-falling and circular movement about said shaft, tile gripping or holding mechanism carried by said frame, means for giving the tile-carrying frame a rising-and-falling and step-by-step rotary motion, means for spraying, flipping, or brushing decorative or glazing material on to the tiles, means for operating the spraying, flipping, and brushing mechanism, and for taking it out of action as required, means for determining the length of time during which the decorative or glazing material shall be sprayed, flipped, or brushed on to the tiles, and means for adjusting the timing mechanism.

10,288 of 1902.—G. E. HEMINGWAY and G. W. GREEN: *Means or Apparatus for Forming or Pressing Pipe or Tube Sections out of Metal Plates.*

Means or apparatus for forming or pressing pipe or tube sections out of metal plates, consisting of a lower or outer female block or bed and an upper or inner male block or bed adapted to be pressed

* All these applications are in the stage in which opposition to the grant of Patents upon them can be made.

towards each other, and so form the pipe or tube section between their respective faces.

18,180 of 1902.—J. PARR: *Windows.*

The object of this invention is to enable sash frames to be taken out of window frames by removing a bead, and to enable the bottom sash to open out.

MEETINGS.

SATURDAY, MAY 23.

Incorporated British Institute of Certified Carpenters.—Visit to the new Gaiety Theatre in course of erection. 3 p.m.

St. Paul's Ecclesiological Society.—Visit to the Church of Aldenham. Train to Watford from Euston at 2.40 p.m., or from Broad-street at 2.20 p.m.

MONDAY, MAY 25.

Surveyors' Institution.—Annual general meeting. 3 p.m.

Builders' Benevolent Institution.—Committee meeting. 5 p.m.

Church Crafts League.—Half-yearly general meeting at Clifford's Inn Hall, Fleet-street, E.C. A lecture will be given by Mr. F. C. Eeles on "Altars: their Arrangement and Ornaments" (illustrated by lantern slides). 8 p.m.

TUESDAY, MAY 26.

Royal Institution.—Professor E. J. Garwood, M.A., on "The Work of Ice as a Geological Agent." I. 5 p.m.

THURSDAY, MAY 28.

Royal Institution.—Professor J. A. Fleming, M.A., on "Electric Resonance and Wireless Telegraphy." I. 5 p.m.

Institution of Electrical Engineers.—Annual general meeting to receive the annual Report of the Council and the statement of accounts and balance-sheet. The announcement of the election of the new Council will also be made at this meeting. 5 p.m.

Junior Institution of Engineers.—Visit to the new reservoir works of the New River Water Co. at Kempton, under the guidance of the engineer, Mr. Joseph Francis. Train leaves Waterloo 1.20 p.m.

FRIDAY, MAY 29.

Royal Institution.—His Serene Highness Albert Prince of Monaco on "The Progress of Oceanography." 9 p.m.

SATURDAY, MAY 30.

Edinburgh Architectural Association.—Visit to Perth and Scone.

Royal Institution.—Professor Silvanus Thompson on "The 'De Magnete' and its Author." I. 3 p.m.

SOME RECENT SALES OF PROPERTY:

ESTATE EXCHANGE REPORT.

May 6.—By A. B. CASTLE (at Great Yarmouth).

Belton, Suffolk.—The King's Head Hotel, with enclosure of marsh land, 8 a. 1 r. 39 p., f. £5,600

May 8.—By RUSSELL & SON (at Leominster)

Middleton-on-Hill, Hereford.—Church Farm, 80 a. 2 r. 1 p., f. 1,910

By W. BROWN & Co. (at Tring).

Tring, Herts.—New Town House, with orchard and malting, area 2 a. 0 r. 8 p., f. 1,320

1 to 6, Newtown and four cottages adjoining, f., w.r. 74*l.* 2s. 890

By CUMBERLAND & SONS (at Derby).

Thurvaston, Derby.—Four closes of land, 19 a. 3 r. 37 p., f. 800

May 9.—By FENN & Co. (at Colchester).

Thorrington, Essex.—The Gate House Farm, including brickyard, 160 a. 0 r. 4 p., f., y.r. 115*l.* 1,975

By EVANS & EVANS (at Stafford).

Walford, Staffs.—Freehold farmhouse and 111 a. 3 r. 11 p., y.r. 150*l.* 3,500

Slinden, Staffs.—Villa Farm, 88 a. 0 r. 1 p., f., y.r. 140*l.* 3,700

Four freehold cottages, with wheelwright's and blacksmith's shops, area 0 a. 3 r. 24 p., f. 350

By FULLER, MOON, & FULLER (at Newport).

Whitwell, &c., Isle of Wight.—Dean and Berryl farms, 281 a. 3 r. 30 p., f., y.r. 350*l.* 7,400

May 11.—By NIGHTINGALE, PHILLIPS, & PAGE.

Kingston-on-Thames, Surrey.—High-st., Fricker's Eagle Brewery, f., with 28 tied houses 99,500

47, 49, 51, and 53, Fairfield-rd., f., w.r. 72*l.* 16s. 1,110

New Malden, Surrey.—Sycamore-gr., The Cottage, u.t. 61 yrs., g.r. 3*l.*, y.r. 25*l.* 300

Teddington, Middx.—2 to 10, Warwick Cottages, u.t. 60½ yrs., g.r. 22*l.* 10s., w.r. 128*l.* 14s. 700

Ham Common, Surrey.—Main-rd., a freehold building site 260

Kingston-on-Thames, Surrey.—24, High-st. (S.), f., y.r. 70*l.* 1,620

26, High-st. (S.), f., y.r. 50*l.* 1s. 1,100

28, High-st. (S.), f., y.r. 130*l.* 0s. 6d. 3,100

30, High-st. (S.), f., y.r. 100*l.* 2,400

32, High-st. (S.), f., y.r. 60*l.* 4s. 1,250

Kingston-on-Thames, Surrey.—High-st., freehold stabling premises, y.r. 18*l.* 285

High-st., Clatten Wharf, f., y.r. 55*l.* 0s. 2d. 1,375

High-st., Burgoine's Boat-houses and Boat-building Yard, f., y.r. 140*l.* 3,000

Union-st., freehold business premises, y.r. 42*l.* 850

New Malden, Surrey.—South 1 a., three enclosures of land, 17 a. 3 r. 0 p., f. 900

By J. H. BETHELL.

Homerton.—67 and 69, Glyn-rd., u.t. 70 yrs., g.r. 8*l.*, w.r. 75*l.* 8s. 615

Forest Gate.—26, Station-rd. (S.) f., y.r. 45*l.* 920

East Ham.—75, Barking-rd. (S.), f., y.r. 52*l.* 1,080

100, Katherine-rd. (S.), u.t. 81½ yrs., g.r. 4*l.* 10s., y.r. 35*l.* 455

Manor Park.—Church-rd., The Church-rd. Bakery (S.), f., y.r. 45*l.* 910

East Ham.—15, Hartley-av., f., e.r. 28*l.* 12s. 310

Plaistow.—51, Grange-rd. (S), f., y.r. 32*l.* 305

By GREEN & SON (Hammersmith).

Hammersmith.—1, 3, 5, and 7, Bradmore Park-rd., u.t. 60 yrs., g.r. 16*l.*, w.r. 140*l.* 8s. 845

Maida Hill.—17, 19, and 21, Portnall-rd., u.t. 75½ yrs., g.r. 21*l.*, y.r. 122*l.* 1,050

By JONES, SON, & DAY.

Wanstead.—Grove-rd., five plots of building land, f. £600

East Ham.—Barking-rd., two plots of building land, f. 265

By C. & F. RUTLEY.

Caterham Valley, Surrey.—3, 4, 5, and 6, the villas, f., y.r. 153*l.* 2,130

Farningham-rd., Hamilton House, f., w.r. 42*l.* 18s. 260

2 to 5, Hamilton cottages, f., w.r. 87*l.* 2s. 630

High-st., 19 plots of building land, f. 1,400

Farningham-rd., 16 plots of building land, f. 360

Purley, Surrey.—Godstone-rd., Foxley Hatch and 2 r. 9 p., f., y.r. 80*l.* 1,520

Godstone-rd., Foxley Lodge and 3 r. 20 p., f., y.r. 60*l.* 1,000

Foxley-rd., four plots of building land, f. 860

By TUCKETT & SON.

Stamford Hill.—28, Amhurst-pk., u.t. 75 yrs., g.r. 25*l.*, y.r. 120*l.* 1,250

May 12.—By BEALE & CAPPS.

Notting Hill.—107, Walmer-rd., u.t. 41 yrs., g.r. 6*l.* 5s., y.r. 45*l.* 420

By CHANCELLOR & SONS.

Ascot Heath, Berks.—Firbank, and 2 a. 0 r. 23 p., f., y.r. 190*l.* 4,000

By DEBENHAM, TEWSON, & Co.

Binfield, Berks.—Tilehurst-la., Park Lodge, and 3 a. f., p. 4,000

By HAMPTON & SONS.

Combe Martin, Devon.—Glenavon and 6½ a. f. 2,050

By MILLER & REID.

Edgware, Middlesex.—1 and 2, Spring-villas; also Spring Villa, y.r. 61*l.* 16s.; together with moiety of a plot of building land area 0 a. 3 r. 24 p., f. 1,300

St. John's Wood.—13 and 17, Belgrave-rd., u.t. 47 yrs., g.r. 21*l.*, y.r. 98*l.* 820

By J. S. RICHARDSON.

Clerkenwell.—39, Warner-st (S), f., y.r. 32*l.* 460

New Southgate.—15, Lower Park-rd., f., e.r. 34*l.* 300

By ROGERS, CHAPMAN, & THOMAS.

South Kensington.—11, The Boltons, and 11, Bolton's-mews, u.t. 29 yrs., g.r. &c. 17*l.* p. 2,500

Battersea.—Lavender-rd., f.g.r.'s 27*l.*, reversion in 32 and 33 yrs. 855

By TOWERS, ELLIS & Co.

Hyde Park.—82, Porchester-ter., u.t. 40½ yrs., g.r. 13*l.* p. 1,030

4, Porchester-sq. Mews, u.t. 40½ yrs., g.r. nil, y.r. 40*l.* 345

By WALTON & LEE.

Bayswater.—12, 16, and 21, Hatherley-gr., u.t. 67½ yrs., g.r. 31*l.* 1s., y.r. 262*l.* 5,780

Wandsworth-rd.—Rashleigh-st., f.g.r.'s 18*l.*, reversion in 64 yrs. 410

By C. P. WHITELEY.

De Beauvoir Town.—Ufton-gr., f.g.r. 25*l.* 10s., u.t. 18¾ yrs., g.r. 1*l.* 10s. 315

By T. WOODS.

Sutton, Middx.—Sutton-rd., The Hermitage and 1½ a., c., y.r. 70*l.* 1,975

By J. C. Platt (at Hammersmith).

Hammersmith.—145, The Grove, u.t. 73 yrs., g.r. 11*l.*, e.r. 50*l.* 455

Shepherd's Bush.—2 and 3, Well's-rd., f., w.r. 72*l.* 16s. 710

Brentford, Middx.—257, High-st. (S.), c., y.r. 27*l.* 350

May 13.—By W. ASHMOLE.

Barking, Essex.—23, 25, 27, 49, and 51, Wakering-rd., f., w.r. 98*l.* 12s. 1,110

18, 20, and 22, Glenny-rd., f., w.r. 53*l.* 6s. 565

East Ham.—33 to 51 (odd), Pelham-rd., f., w.r. 126*l.* 15s. 1,110

1 to 23 (odd), Mountfield-rd., u.t. 67½ yrs., g.r. 14*l.* 16s., w.r. 176*l.* 16s. 1,030

By BAXTER, PAYNE, & LEPPER.

Orpington, Kent.—Tripe's Farm, 25 a. 3 r. 36 p., f., p. 1,000

An enclosure of land, 5 a. 3 r. 7 p., f., p. 300

By CHAMPION & BUSBY.

Saxmundham, Suffolk.—Rose Hill House and 8 a., f., p. 900

By G. GOULDSMITH, SON, & Co.

Belgravia.—4, Lowndes-st. and 5, Belgrave-mews West, u.t. 19 yrs., g.r. 40*l.*, y.r. 340*l.* 3,040

By HORNE & Co.

New Barnet, Herts.—Lyonsdown-rd., Twynham, Crowhurst, and Walmgate, f., y.r. 235*l.* 2,710

Shaftesbury-av., f.g.r.'s 22*l.* 1s., reversion in 88 yrs. 550

8 to 16 (even), Shaftesbury-av., f., y.r. 138*l.* 1,470

Bulwer-rd., f.g.r.'s 28*l.*, reverslon in 81 yrs. 745

Bulwer-rd., f.g.r. 12*l.*, reversion in 83 yrs. 320

Potters-road, The Hadley View Building Estate, 10 a. 2 r. 0 p., f., p. 3,900

Walthamstow.—Back-rd., f.g.r.'s 21*l.*, reversion in 74 yrs. 510

By HUNTER & HUNTER.

Hyde Park.—35, Albion-st., and 21 and 22, Albion-mews, East, u.t. 19 yrs., g.r. 10*l.* 10s., p.

By H. MUSKETT & Co.

Crouch Hill.—32, Trinder-rd., u.t. 73 yrs., g.r. 6*l.* 6s., y.r. 34*l.* 380

By DOUGLAS YOUNG & Co.

Brixton.—9, Hayter-rd., u.t. 64 yrs., g.r. 10*l.* 10s. e.r. 48*l.* 450

By PHIBBS GIBSON (at Ealing).

Hanwell.—Milton-rd., 15 plots of building land, f. 963

Woodfield-rd., two plots of building land, f. 155

Shakespeare-rd., Fairmead, u.t. 97 yrs., g.r. 8*l.* 8s., y.r. 45*l.* 540

Laurel-gdns., Mansfield, The Laurels, and St. Kilda, f., w.r. 86*l.* 1,300

15, Seward-rd., u.t. 96 yrs., g.r. 5*l.*, w.r. 39*l.* .. 300

Ealing.—22, Lavington-rd., u.t. 97 yrs., gr. 8*l.* 8s., y.r. 50*l.* 550

Montague-rd., Belle Vue, u.t. 91½ yrs., g.r. 6*l.* 10s., y.r. 38*l.* 440

8, Melbourne-av., u.t. 97½ yrs., g.r. 7*l.* 7s., e.r. 45*l.* 425

By T. WOODS (at Hounslow).

Hounslow, Middx.—Staines-rd., York Villas, c., e.r. 35*l.* 500

1, 2, and 3, York-pl. (S.), c., y.r. 91*l.* 1,620

Staines-rd., a plot of land with greenhouses thereon, f., y.r. 50*l.* 820

Cromwell-rd., Marlborough and Glenmore Cottages, f., y.r. 38*l.* 620

1 and 2, Rose Villas, f., w.r. 39*l.* 680

Cambridge-rd., a plot of building land, f. £170

Orchard-rd., Zoar Cottage, f., w.r. 15*l.* 12s. 230

1 to 4, Vickers-cottages, f., w.r. 57*l.* 16s. 635

5, 6, and 7, Paynter's-cottages, f., w.r. 42*l.* 18s. 385

1 and 2, Manor-cottages, f., w.r. 26*l.* 200

74 to 80 (even), High-st. (s), f., p. 2,300

By SEDGWICK, SON, & WEALL (at Rickmansworth).

Rickmansworth, Herts.—High-st., freehold shop and house, y.r. 74*l.* 1,500

Solomon's Hill, enclosure of freehold building land 290

By T. J. BARNETT & SON (at Warwick).

Newbold Pacey, Warwick.—Bromson Hill Farm, 166 a. 2 r. 5 p., f., p. 2,500

May 14.—By FAREBROTHER, ELLIS, & Co.

Fleet-st.—Clifford's Inn, area 38,000 ft., f., p. 100,000

Rotherfield Greys, Oxon.—Satwell and 90 a. 3 r. 18 p., f., p. 3,500

Weston-super-Mare, Somerset.—1, 4, and 7, Royal-ter., f., y.r. 320*l.* 5,715

By CHAS. ATKINS.

Lewisham.—58 and 62, Albacore-cres., u.t. 87 yrs., g.r. 10*l.*, y.r. 58*l.* 660

By BISLEY & SONS.

Streatham.—29 to 61 (odd), Westcote-rd., f., w.r. 640*l.* 18s. 5,950

Bermondsey.—31 to 34, Enid-st., u.t. 14 yrs., g.r. 9*l.*, w.r. 119*l.* 12s. 415

By BOYCE, EVENS, & CARPENTER.

Hackney.—1 to 5, Helmsley-pl., f., w.r. 127*l.* 8s. 530

By GARRETT, WHITE, & POLAND.

Regent-st.—Nos. 246 and 248 (S), u.t. 10 yrs., g.r. &c., 156*l.*, y.r. 740*l.* 14,050

Fleet-st.—34, Bouverie-st. (S), f., y.r. 140*l.* 4,600

Cavendish-sq.—91, Wigmore-st. (S), f., y.r. 325*l.* 5,800

May 14.—By W. HALLETT & Co.

Hyde Park.—77, Westbourne-ter., u.t. 34¼ yrs., g.r. 2*l.*, y.r. 150*l.* 1,750

By HOWELL, SON, & BONNIN.

Pimlico.—71, Grosvenor-rd., u.t. 30½ yrs., g.r. 9*l.*, y.r. 55*l.* 500

By JENKINS & SONS.

New Cross.—90, Lewisham High-rd., u.t. 49 yrs., g.r. 8*l.*, e.r. 45*l.* 380

City of London.—2, New London-st. (offices), f., y.r. 248*l.* 3s 5d. 6,000

By NEWBON, EDWARDS, & SHEPHARD.

St. Luke's.—23, Gee-st., f., w r. 36*l.* 8s. 475

Canonbury.—41 and 43, St. Paul's-rd., u.t. 33 yrs., g.r. 15*l.*, y.r. 94*l.* 625

20, St. Mary's-rd., u.t. 42 yrs., g.r. 5*l.*, y.r. 65*l.* 500

32, Marquess-rd., u.t. 44¼ yrs., g.r. 10*l.*, y.r. 60*l.* 420

Westbourne Park.—24, St. Stephen's-sq., u.t. 52 yrs., g.r. 16*l.*, e.r. 95*l.* 725

Homerton.—35, Ashenden-rd., u.t. 78 yrs., g.r. 3*l.*, y.r. 48*l.* 580

By SMALLPEICE, ALLEN, & Co.

Woking, Surrey.—York-rd., Rosedale and Elmlea, f., y.r. 56*l.* (including mortgage) 812

Tottenham.—776 and 778, Seven Sisters-rd. (S), f., y.r. 61*l.* 4s. 700

693, Seven Sisters-rd. (S), u.t. 77 yrs., g.r. 8*l.* 10s. y.r 28*l.* 270

4 to 14 (even), Carlton-rd., u.t. 73¾ yrs., g.r. 30*l.* w.r. 184*l.* 12s. 1,000

Finsbury Park.—51, 53, 55, and 57, Gloucester-rd., u.t. 65 and 66 yrs., g.r. 54*l.* 12s., y.r. 242*l.* 10s.; also 2 and 4, Princess-rd. u.t. 76½ yrs., g.r. 18*l.* 18s., y.r. 104*l.* 10s. 3,180

By STIMSON & SONS.

Whitechapel.—Chicksand-st., The Enterprise, p.-h., freehold rental of 60*l.*, reversion in 27 yrs. 1,400

King Edward-st., The Queen Adelaide b.-h., freehold rental of 45*l.*, reversion in 33 yrs. .. 800

Homerton.—Digby-rd., The Lord Warden b.h., freehold rental of 40*l.*, reversion in 68 yrs. 610

Houndsditch.—Gravel-la., The Box Tree p.-h., f., y.r. 80*l.*, with goodwill 2,000

Peckham.—1 to 4, Elland-rd., with range of stabling in rear, f., y.r. 195*l.* 2,200

188 to 194 (even), Hollydale-rd., u.t. 70½ yrs., g.r. 18*l.*, w.r. 148*l.* 4s. 1,170

Regent's Park.—80, Albany-st. (S.), u.t. 19½ yrs., g.r. 12*l.* 12s., e.r. 100*l.* 500

Hyde Park.—17, Southwick-st., u.t. 27 yrs., g.r. 12*l.*, y.r. 80*l.* 635

Chelsea.—20, St. Mark's-rd. (S.), f., y.r. 36*l.* 505

Wimbledon.—9 and 11, Ethelbert-rd., u.t. 86 yrs., g r. 13*l.*, y.r. 55*l.* 400

Plumstead, Kent.—51, 73, 107, 109, and 111, Sandy Hill-rd., u.t. 48 to 71¼ yrs., g.r. 10*l.*, y.r. 134*l.* 255

Norwood.—Rothschild-st., f.g.r. 24*l.*, reversion in 96 yrs. 570

Catford.—Doggett-rd, a freehold siding, y.r. 20*l.* 550

Finchley.—7, Rosebery-ter. (S), fr, y.r. 30*l.* 370

Herne Bay, Kent.—Pier-av., &c., seven plots of building land, f. 300

By W. & F. EVES (at Uxbridge).

Chalfont St. Peter, Bucks.—Gold Hill Common, a freehold holding, 5 a., y.r. 25*l.* 610

Two freehold cottages, w.r. 27*l.* 6s. 295

Two copyhold cottages, w.r. 20*l.* 16s. 260

Joiner's-la., Swan Grove House and 1½ a., f., y.r. 25*l.* 730

Joiner's-la., four cottages, house, and blacksmith's shop, f. and c., w.r. 30*l.* 18s. 360

Gravel Hill, a freehold cottage, w.r. 7*l.* 16s. 130

Dean Acre (residence) and 3 a., f., y.r. 28*l.* 720

Dean Acre Cottages (three) f., w.r. 16*l.* 18s. 325

1 to 4, Pleasant-pl., f., w.r. 20*l.* 16s. 290

Pightle Meadow, 5 a., f., y r. 8*l.* 510

By NORMAN & SON (at Uxbridge).

Gerrard's Cross, Bucks.—Austen Wood Common-rd., enclosure of building land, 3 a. 1 r., f. .. 600

By MOORE & SONS (at Cheltenham).

Boddington, Glos.—Barrow Court estate, 207 a. 3 r. 14 p., f., y.r. 225*l.* 5,200

By R. J. STEEL (at Kew Bridge).

Brentford, Middlesex.—1 and 2, Pembroke Cottages, f., w.r. 36*l.* 8s. 510

Enfield-rd., a freehold building plot 150

42, 43, and 44, New-rd., f., w.r. 42*l.* 18s. 455

35, 42, 44, and 46, Catherine Wheel-yard, f., w.r. 37*l.* 14s. 300

406 and 407, High-st, c., w.r. 18*l.* 4s. 355

Brentford, Middx.—6 and 7, Orchard-rd., f., w.r. 48*l.* 2s. 615

Whitestile-rd., two freehold building plots 100

Ealing.—Carlyle-rd., six freehold building plots.. 330

Hounslow, Middx.—Wellington-rd., a copyhold residence, w.r. 18*l.* 4s. £235
Kingsley-rd., two cottages, u.t. 49 yrs., g.r. 2*l.*, w.r. 28*l.* 12s. 220
Upton-rd., four copyhold building plots 155
Barnes.—56 to 62, 74 to 94 (even), Railway-st., f., w.r. 250*l.* 4s. 3,355
Railway-st., f.g.r. 4*l.*, reversion in 96 yrs. 110
Richmond, Surrey.—67, Sheen-rd. (S), f., y.r. 30*l.* 550
May 15.—BOYTON, PEGRAM, & BUCKMASTER.
Leyton.—282 to 290 (even), High-rd. (S), f., y.r. 243*l.* 3,200
Fulham.—159, Munster-rd. (S), u.t. 90 yrs., g.r. 6*l.* 10s., y.r. 45*l.* 450
Chiswick.—8 to 14 (even), Annandale-rd., u.t. 76 yrs., g.r. 25*l.* 4s. w.r. 156*l.* ..... [1,000
Fulham.—43, Coomber-rd. (S), u.t. 69 yrs., g.r. 4*l.*, y.r. 52*l.* 280
Wandsworth.—77 to 91 (odd), North-st., f., w.r. 169*l.* 1,500
Putney.—1 and 3, Salvin-rd., u.t. 82 yrs., g.r. 11*l.*, w.r. 80*l.* 12s. 595
Chiswick.—84 to 92 (even), Dale-st., u.t. 65 yrs., g.r. 20*l.*, w.r. 162*l.* 10s. 1,180
Fulham.—11, Sherbrook-rd., u.t. 73 yrs., g.r. 5*l.* 10s., w.r. 41*l.* 12s. 335
By HUMBERT & FLINT.
Wickhambreaux, Kent.—Three enclosures of grazing land, 22 a. 3 r. 17 p. f. 585
Sturry, Kent.—Rushbourne Farm, 252 a. 3 r. 4 p., f. 3,750
Chislet, Kent.—Four enclosures of grazing land, 44 a. 0 r. 23 p., f. 1,130
Sittingbourne, Kent.—Little Glover's Farm, 6 a. 3 r. 0 p., f. 2,800
9, Frith-st., f., y.r. 15*l.* 10s. 750
1 to 4, Queen-st., f., w.r. 46*l.* 16s. 550
High-st., f.g.r's 12*l.* 4s., reversion in 8 yrs. 1,500
High-st., &c., f.g.r. 23*l.*, reversion in 10 yrs. 2,000
Clapton, &c., Northants.—The Clapton Estate, 967 a. 1 r. 3 p., f. 25,000
Titchmarsh, Northants.—An enclosure of pasture, 8 a. 2 r. 9 p., f. 300
Notting Hill.—127, Walmer-rd. (s.), u.t. 38 yrs., g.r. 6*l.* 10s., y.r. 44*l.* 4s 230
Northwood, Middx.—Chester-rd., Chester Lodge, f., p. 770
By JONES, LANG, & CO.
Ponder's End.—Durant's-rd., two plots of building land, f. 420
By MONTAGU & ROBINSON.
Kentish Town.—101 and 103, Lady Margaret-rd., u.t. 66 yrs., g.r. 17*l.* 10s., y.r. 91*l.* 10s. 940
Norwood.—286, Holmesdale-rd., f., e.r. 50*l.* 450
Brixton.—40, Lorn-rd., u.t. 31 yrs., g.r. 7*l.*, y.r. 42*l.* 230
By W. W. READ & Co.
New Malden, Surrey.—Avenue-rd., Avenue Lodge, u.t. 75½ yrs., g.r. 5*l.*, y.r. 30*l.* 275
Hackney.—7, Banbury-rd., u.t. 50½ yrs., g.r. 6*l.*, y.r. 34*l.* 355
26, Holcroft-rd., u.t. 40 yrs., g.r. 3*l.* 10s., w.r. 26*l.* 230
Homerton.—61, Sidney-rd., u.t. 56½ yrs., g.r. 4*l.*, w.r. 32*l.* 10s. 245
By RIDER & SONS.
Kentish Town.—4, 22, 23, 24, 25, 26, 27, 33, and 34, Litcham-st., f., w.r. 421*l.* 4s. 3,500
By WOODS & SNELLING.
Beckenham, Kent.—Birkbeck-rd., f.g.r. 5*l.*, reversion in 69 yrs. 150

Contractions used in these lists.—F.g.r. for freehold ground-rent; l.g.r. for leasehold ground-rent; i.g.r. for improved ground-rent; g.r. for ground-rent; r. for rent; f. for freehold; c. for copyhold; l. for leasehold; p. for possession; e.r. for estimated rental; w.r. for weekly rental; q.r. for quarterly rental; y.r. for yearly rental; u.t. for unexpired term; p.a. for per annum; yrs. for years; la. for lane; st. for street; rd. for road; sq. for square; pl. for place; ter. for terrace; cres. for crescent av. for avenue; gdns. for gardens; yd. for yard; gr. for grove; b.h. for beer-house; p.h. for public-house; o. for offices; s. for shops.

PRICES CURRENT OF MATERIALS.

*** Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

BRICKS, &c.

	£ s. d.	
Hard Stocks	1 15 0	per 1,000 alongside, in river.
Rough Stocks and Grizzles.....	1 12 0	,, ,, ,,
Facing Stocks....	2 12 0	,, ,, ,,
Shippers	2 5 0	,, ,, ,,
Flettons	1 7 6	,, at railway depôt
Red Wire Cuts ..	1 12 0	,, ,, ,,
Best Fareham Red	3 12 0	,, ,, ,,
Best Red Pressed Ruabon Facing	5 0 0	,, ,, ,,
Best Blue Pressed Staffordshire ..	4 5 0	,, ,, ,,
Do. Bullnose	4 11 0	,, ,, ,,
Best Stourbridge Fire Bricks	4 8 0	,, ,, ,,
GLAZED BRICKS.		
Best White and Ivory Glazed Stretchers.....	13 0 0	,, ,, ,,
Headers	12 0 0	,, ,, ,,
Quoins, Bullnose, and Flats.....	17 0 0	,, ,, ,,
Double Stretchers	19 0 0	,, ,, ,,
Double Headers..	16 0 0	,, ,, ,,
One Side and two Ends.....	19 0 0	,, ,, ,,
Two Sides and one End	20 0 0	,, ,, ,,
Splays, Chamfered, Squints.....	20 0 0	,, ,, ,,
Best Dipped Salt Glazed Stretchers and Headers	12 0 0	,, ,, ,,
Quoins, Bullnose, and Flats.....	14 0 0	,, ,, ,,
Double Stretchers	15 0 0	,, ,, ,,
Double Headers..	14 0 0	,, ,, ,,
One Side and two Ends.....	15 0 0	,, ,, ,,

PRICES CURRENT (*Continued*).

BRICKS, &c.

	£ s. d.	
Two Sides and one End	15 0 0	per 1,000 at railway depot.
Splays Chamfered, Squints.....	14 0 0	,, ,, ,,
Second Quality White and Dipped Salt Glazed	2 0 0	,, less than best.
Thames and Pit Sand	6	9 per yard, delivered.
Thames Ballast	6	0 ,, ,,
Best Portland Cement	30	0 per ton, delivered.
Best Ground Blue Lias Lime..	20	6 ,, ,,

NOTE.—The cement or lime is exclusive of the ordinary charge for sacks.

Grey Stone Lime	10s 6d. per yard, delivered.
Stourbridge Fire-clay in sacks	27s. 6d. per ton at rly. dpt.

STONE.

	s. d.	
Ancaster in blocks	1 11	per ft. cube, deld rly. depôt.
Bath ,, ...	1 7	,, ,,
Farleigh Down Bath ..	1 8	,, ,,
Beer in blocks	1 6	,, ,,
Grinshill ,, ...	1 10	,, ,,
Brown Portland in blocks	2 2	,, ,,
Darley Dale in blocks..	2 4	,, ,,
Red Corsehill ,,	2 5	,, ,,
Closeburn Red Freestone	2 0	,, ,,
Red Mansfield ,,	2 4	,, ,,

YORK STONE—*Robin Hood Quality.*

	s. d.	
Scappled random blocks	2 10	per ft. cube, deld. rly. depôt.
6 in. sawn two sides landings to sizes (under 40 ft. super.)	2 3	per foot super. ,,
6 in. Rubbed two sides Ditto, Ditto	2 6	,, ,,
3 in. Sawn two sides slabs (random sizes)..	0 11½	,, ,,
2 in. to 2½ in. Sawn one side slabs (random sizes)	0 7½	,, ,,
1½ in. to 2 in. ditto, ditto	0 6	,, ,,

BEST HARL YORK—

Scappled random blocks	3 0	per ft. cube ,,
6 in. sawn two sides, landings to sizes (under 40 ft. sup.)	2 8	per ft. super. ,,
6 in. Rubbed two sides Ditto	—	,, ,,
3 in. sawn two sides slabs (random sizes)	1 2	,, ,,
2 in. self-faced random flags.....	0 5	,, ,,
Hopton Wood (Hard Bed)	in blocks	2 3 per ft. cube.
,, ,, ,,	6 in. sawn both sides landings	2 7 per ft. super. deld. rly. depôt
,, ,, ,,	3 in. do.	1 2½ ,, ,,

SLATES.

in. in.	£ s. d.	
20×10 best blue Bangor..	13 2 6	per 1000 o. 1200 at ry.dep.
20×12 ,, ,, ,, ..	13 17 6	,, ,,
20×10 best seconds ,,	12 15 0	,, ,,
20×12 ,, ,, ,,	13 10 0	,, ,,
16×8 best ,,	7 0 0	,, ,,
20×10 best blue Portmadoc ..	12 5 0	,, ,,
16×8 best blue Portmadoc	6 5 0	,, ,,
20×10 best Eureka unfading green....	15 2 6	,, ,,
20×12 ,, ,,	17 2 6	,, ,,
18×10 ,, ,,	12 10 0	,, ,,
16×8 ,, ,,	10 5 0	,, ,,
20×10 permanent green	11 0 0	,, ,,
18×10 ,, ,,	9 5 0	,, ,,
16×8 ,, ,,	6 10 0	,, ,,

TILES.

	s. d.	
Best plain red roofing tiles..	42 0	per 1,000, at rly. depôt.
Hip and valley tiles....	3 7	per doz. ,, ,,
Best Broseley tiles	50 0	per 1,000 ,, ,,
Do. Ornamental Tiles	52 6	,, ,, ,,
Hip and valley tiles....	4 0	per doz. ,, ,,
Best Ruabon Red, brown or brindled Do. (Edwards)	57 6	per 1,000 ,, ,,
Do. ornamental Do.	60 0	,, ,, ,,
Hip tiles	4 0	per doz. ,, ,,
Valley tiles.....	3 0	,, ,, ,,
Best Red or Mottled Staffordshire Do. (Peakes)	51 9	per 1,000 ,, ,,
Do. Ornamental Do.	54 6	,, ,, ,,
Hip tiles	4 1	per doz. ,, ,,
Valley tiles.....	3 8	,, ,, ,,
Best "Rosemary" brand plain tiles	48 0	per 1,000 ,, ,,
Do. Ornamental Do.	50 0	,, ,, ,,
Hip tiles	4 0	per doz. ,, ,,
Valley tiles	3 8	,, ,, ,,

WOOD.

		At per standard. £ s. d.	£ s. d.
Deals: best 3 in. by 11 in. and 4 in. by 9 in. and 11 in.....		15 10 0	16 10 0
Deals: best 3 by 9.....		14 10 0	15 10 0
Battens: best 2½ in. by 7 in. and 8 in., and 3 in. by 7 in. and 3 in.....		11 10 0	12 10 0
Battens: best 2½ by 6 and 3 by 6 ..		0 10 0	less than 7 in. and 8 in.
Deals: seconds		1 0	0 less than best
Battens: seconds		0 10 0	,, ,, ,,
2 in. by 4 in. and 2 in. by 6 in. ..		9 0 0	9 10 0
2 in. by 4½ in. and 2 in. by 5 in. ..		8 10 0	9 10 0
Foreign Sawn Boards—			
1 in. and 1¼ in. by 7 in.		0 10 0	more than battens.
¾ in.		1 0 0	,,
Fir timber: Best middling Danzig or Memel (average specification		At per load of 50 ft. 4 10 0	5 0 0
Seconds		4 5 0	4 10 0
Small timber (8 in. to 10 in.)		3 12 6	3 15 0
Small timber (6 in. to 8 in.).....		3 0 0	3 10 0
Swedish balks		2 15 0	3 0 0
Pitch-pine timber (30 ft. average)..		3 5 0	3 15 0

PRICES CURRENT (*Continued*).

WOOD.

JOINERS' WOOD.	At per standard. £ s. d.	£ s. d.
White Sea: First yellow deals, 3 in. by 11 in.....	23 0 0	24 0 0
3 in. by 9 in.	21 0 0	22 10 0
Battens, 2½ in. and 3 in. by 7 in.	17 0 0	18 10 0
Second yellow deals, 3 in. by 11 in.	18 10 0	20 0 0
,, ,, 3 in. by 9 in.	17 10 0	19 0 0
Battens, 2½ in. and 3 in. by 7 in.	13 10 0	14 10 0
Third yellow deals, 3 in. by 11 in. and 9 in.	15 10 0	16 10 0
Battens, 2½ in. and 3 in. by 7 in.	11 10 0	12 10 0
Petersburg: first yellow deals, 3 in. by 11 in.	21 0 0	22 10 0
Do. 3 in. by 9 in.....	18 0 0	19 10 0
Battens.....	13 10 0	15 0 0
Second yellow deals, 3 in. by 11 in.....	16 0 0	17 0 0
Do. 3 in. by 9 in.	14 10 0	16 0 0
Battens.....	11 0 0	12 10 0
Third yellow deals, 3 in. by 11 in.....	13 10 0	14 0 0
Do. 3 in. by 9 in.	13 0 0	14 0 0
Battens	10 0 0	11 0 0
White Sea and Petersburg:—		
First white deals, 3 in. by 11 in.	14 10 0	15 10 0
,, ,, 3 in. by 9 in.	13 10 0	14 10 0
Battens.....	11 0 0	12 0 0
Second white deals 3 in. by 11 in.	13 10 0	14 10 0
,, ,, ,, 3 in. by 9 in.	12 10 0	13 10 0
,, ,, ,, battens.....	9 10 0	10 10 0
Pitch-pine: deals	16 0 0	18 0 0
Under 2 in. thick extra	0 10 0	1 0 0
Yellow Pine—First, regular sizes ..	33 0 0	upwards.
Oddments	22 0 0	24 0 0
Seconds, regular sizes	24 10 0	26 10 0
Yellow Pine Oddments	20 0 0	22 0 0
Kauri Pine—Planks, per ft. cube..	0 3 6	0 4 6
Danzig and Stettin Oak Logs—		
Large, per ft. cube	0 2 6	0 3 6
Small ,, ,, ...	0 2 3	0 2 6
Wainscot Oak Logs, per ft. cube ..	0 5 0	0 5 6
Dry Wainscot Oak, per ft. sup. as inch	0 0 7	0 0 8
¾ in. do. do.	0 0 6½	- - -
Dry Mahogany—		
Honduras, Tabasco, per ft. sup. as inch	0 0 9	0 0 11
Selected, Figury, per ft. sup. as inch	0 1 6	0 2 0
Dry Walnut, American, per ft. sup. as inch	0 0 10	0 1 0
Teak, per load	17 0 0	21 0 0
American Whitewood Planks—		
Per ft. cube	0 4 0	- - -
Prepared Flooring—	Per square.	
1 in. by 7 in. yellow, planed and shot.....	0 13 6	0 17 6
1 in. by 7 in. yellow, planed and matched.....	0 14 0	0 18 0
1¼ in. by 7 in. yellow, planed and matched.....	0 16 0	1 1 6
1 in. by 7 in. white, planed and shot.....	0 11 6	0 13 6
1 in. by 7 in. white, planed and matched.....	0 12 0	0 14 0
1¼ in. by 7 in. white, planed and matched.....	0 14 6	0 16 6
¾ in. by 7 inch yellow matched and beaded or V-jointed boards	0 11 0	0 13 6
1 in. by 7 in. do. do. do.	0 14 0	0 18 0
¾ in. by 7 in. white do. do.	0 10 0	0 11 6
1 in. by 7 in. do. do. do.	0 11 6	0 13 6

6-in. at 6d. to 9d. per square less than 7-in.

JOISTS, GIRDERS, &c.

	In London, or delivered Railway Vans, per ton. £ s. d.	£ s. d.
Rolled Steel Joists, ordinary sections	6 5 0	7 5 0
Compound Girders ,, ,,	8 2 6	9 5 0
Angles, Tees and Channels, ordinary sections	7 17 6	8 17 6
Flitch Plates	8 5 0	8 15 0
Cast Iron Columns and Stanchions, including ordinary patterns	7 2 6	8 5 6

METALS.

IRON—	Per ton, in London. £ s. d.	£ s. d.
Common Bars.....	7 15 0	8 5 0
Staffordshire Crown Bars, good merchant quality	8 5 0	8 15 0
Staffordshire "Marked Bars" ..	10 10 0	- - -
Mild Steel Bars	9 0 0	9 10 0
Hoop Iron, basis price.....	9 5 0	9 10 0
,, ,, galvanised.....	16 0 0	- - -

(* And upwards, according to size and gauge.)

Sheet Iron, Black.—		
Ordinary sizes to 20 g.	10 0 0	- - -
,, ,, to 24 g.	11 0 0	- - -
,, ,, to 26 g.	12 10 0	- - -
Sheet Iron, Galvanised, flat, ordinary quality—		
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.....	12 15 0	- - -
,, ,, 22 g. and 24 g.	13 5 0	- - -
,, ,, 26 g.....	14 5 0	- - -
Sheet Iron, Galvanised, flat, best quality:—		
Ordinary sizes to 20 g.....	16 0 0	- - -
,, ,, 22 g. and 24 g.	16 10 0	- - -
,, ,, 26 g.....	18 0 0	- - -
Galvanised Corrugated Sheets:—		
Ordinary sizes, 6 ft. to 8 ft. 20 g.	12 15 0	- - -
,, ,, 22 g. and 24 g.	13 5 0	- - -
,, ,, 26 g.....	14 5 0	- - -
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. by 20 g. and thicker ..	12 0 0	- - -
,, ,, 22 g. and 24 g.	13 0 0	- - -
,, ,, 26 g.	14 5 0	- - -
Cut nails, 3 in. to 6 in.	9 5 0	9 15 0

(Under 3 in. usual trade extras.)

[*See also page 553.*

COMPETITIONS CONTRACTS AND PUBLIC APPOINTMENTS.

(For some Contracts, &c., still open but not included in this List, see previous issues.)

COMPETITIONS.

Nature of Work.	By whom Required.	Premiums.	Designs to be delivered
[1]Children's Home	Croydon Union	15*l.* 15*s.* and 10*l.* 10*s.*	June 9
[2]Two Relief Stations	do.	10*l.* 10*s.*	do.
[3]New Library, Taunton	The Trustees	30*l.*, 20*l.*, and 10*l.*	July 20

CONTRACTS.

Nature of Work or Materials.	By whom Advertised.	Forms of Tender, &c., supplied by	Tenders to be delivered
Paving Works, Church-street, and others	Keighley Corporation	W. H. Hopkinson, Civil Engineer, Town Hall, Keighley	May 26
Street Works, &c., Pendleton	Salford Corporation	T. C. Evans, Town Hall, Salford	do.
Street Works, Colenso-street	West Hartlepool Corporation	J. W. Brown, Borough Engineer, West Hartlepool	do.
Concrete Works	Warrington Corporation	Borough Surveyor, Town Hall, Warrington	do.
Paving Works, &c., Alma, and other Roads	Cheriton (Kent) U.D.C.	A. Atkinson, Public Offices, Cheriton	do.
Street Works, New Road, &c.	Brixham U.D.C.	J. L. Alridge, Town Hall, Brixham, Devon	do.
Street Works, Ashton-road, &c.	Failsworth (Lancs) U.D.C.	Surveyor, Town Hall, Failsworth	do.
Water Supply Works, Prestonpans, N.B.	Haddington County Council	Thomson & Wright, Civil Engineers, 22, Rutland-square, Edinburgh	do.
Cast-iron Pipes (1,400 tons)	Brighton Town Council	F. J. Tillstone, Town Hall, Brighton	do.
[4]Foundations, &c., for Electricity Supply	Wednesbury Corporation	Borough Surveyor, Town Hall, Wednesbury	do.
Sewage Disposal Works	Leadgate (Durham) U.D.C.	T. S. Longstaff, Surveyor, Leadgate	do.
Cottage, Penygraig Station, Glam.	Great Western Railway Company	G. K. Mills, Paddington Station,	do.
Rebuilding Business Premises, Aspatria, Cumberland	.....	J. S. Moffat, Architect, 53, Church-street, Whitehaven	do.
Warehouse, Canal-road, Bradford	.....	S. Jackson & Sons, Architects, Tanfield Chambers, Bradford	May 27
Alterations to Premises, 21, and 23, Darley-street	Bradford Corporation	T. E. P. Edwards, City Architect, Town Hall, Bradford	do.
Church Restoration, Gee Cross, near Hyde	.....	J. Hunt & Son, Architects, 4, Warren-street, Stockport	do.
Works at Market	Ramsgate Corporation	T. G. Taylor, Borough Engineer, Town Hall, Ramsgate	do.
School	Penarth School Board	J. H. Phillips, Architect, Cardiff	do.
Walls, &c., Grimshaw-lane	Middleton (Lancs) Corporation	W. Welburn, Borough Surveyor, Town Hall, Middleton	do.
Sewers, &c., Belgrave and Beaumont Leys	Leicester Corporation	E. G. Mawbey, Civil Engineer, Town Hall, Leicester	do.
Sewers, &c., Winchester and Anton-road	Andover Town Council	T. E. Longman, 40, High-street, Andover	do.
Cast-iron Pipes	Maidstone Gas Company	H. Smythe, Engineer, Maidstone	do.
Water Mains, Thwaite Gate, Hunslet	Leeds Corporation	City Engineer, Town Hall, Leeds	do.
Road Works, College-road, &c.	Great Crosby (Lancs) U.D.C.	W. Hall, Civil Engineer, Town Hall, Great Crosby	do.
Drainage Works, &c., Edenfield, Lancs	Ramsbottom U.D.C.	T. H. Bell, Surveyor, Council Offices, Ramsbottom	do.
Two miles Galvanised Iron Fencing, Midhope Reservoir	Barnsley Water Committee	J. H. Taylor, Civil Engineer, Manor House, Barnsley	do.
Street Works, Lochlands	Arbroath Town Council	P. C. Smith, Civil Engineer, Arbroath	do.
Schools, Abertaf, Abercynon	Llanwonno School Board	A. O. Evans, Architect, Pontypridd	do.
Pump House and Destructor Works	West Hartlepool Corporation	J. W. Brown, Borough Engineer, West Hartlepool	do.
Steel Girder Bridge, Long Benton, Northumberland	Tynemouth R.D.C.	J. Waters, Civil Engineer, Long Benton	do.
Additions to Schools, Magherafelt, Ireland	Ramey School Board	J. J. Phillips & Son, Architects, Royal Avenue, Belfast	do.
Retaining Wall and Road Works, Chapel-st., Ponkey	Wrexham R.D.C.	T. R. Evans, Surveyor, Johnston, Ruabon	do.
School, Croston, Lancs	.....	W. H. Dinsley, Architect, 12, Cleveland-street, Chorley	May 28
Additions to R. I. C. Barracks, Lurgan, Ireland	.....	W. H. Stephens & Son, 13, Donegall-square, North Belfast	do.
Sewers, &c.	Leicester Corporation	E. G. Mawbey, Civil Engineer, Town Hall, Leicester	do.
Granite Road Metal (800 tons)	Braintree U.D.C.	H. H. Nankwell, Surveyor, Braintree	do.
Sewerage Works, Belmont	Durham R.D.C.	G. Gregson, Surveyor, 38, Sadler-street, Durham	do.
*Decorating Large Hall in Town Hall	Portsmouth Town Council	C. W. Bevis, Architect, Elm Grove, Southsea	do.
Alterations to Saron Chapel, Aberaman	.....	Rev. P. H. Jenkins, 18, Belmont-terrace, Aberaman	May 29
Eight Houses, Thornton, Yorks.	.....	M. Hall, Architect, 1, Harrison-road, Halifax	do.
Store Premises, Warton Carnforth	Co-operative Soc., Ltd.	R. Walker, Architect, Windermere	do.
Macadam Works, Dudley-road, &c.	Withington U.D.C.	A. H. Mountain, Civil Engineer, Town Hall, West Didsbury	do.
Sewers, Collier-street	Hull Corporation	A. E. White, Civil Engineer, Town Hall, Hull	do.
Sewers, &c., Scale-lane	do.	do.	do.
Additions to Church, Mountpottinger, Belfast	The Committee	Graeme, Watt, & Tulloch, Architects, 77A, Victoria-street, Belfast	May 30
Restoration of Church Spire, Wickham Market, Suffolk	.....	J. S. Corder, Architect, Wimborne House, Ipswich	do.
Additions to Wesleyan Chapel, Wilton Gilbert, Durham	.....	H. T. Gradon, Architect, 22, Market-place, Durham	do.
Church, Chandler's Ford, Hants.	.....	T. H. Northcroft, Sons, & Co., Surveyors, 9, Regent-street, W.	do.
College Buildings, Sheffield	.....	Gibbs & Flockton, Architects, 15, St. James's-row, Sheffield	do.
Additions, &c., Lower Fishguard, Pembrokeshire	.....	J. P. James, Architect, Tenby	do.
Additions to Fish Market	.....	A. B. M'Donald, City Engineer, City Chambers, Glasgow	do.
Bridge Works, &c., King's Norton and other places	Glasgow Corporation	J. H. Garret, Road Surveyor, Shirehall, Worcester	do.
Public Washhouse	Worcestershire County Council	R. M'Killop, Burgh Surveyor, 12, Tay-street, Perth	do.
Sewers, &c. (1,100 tons)	Perth Town Council	R. E. W. Berrington, Civil Engineer, Bank Bldngs, Wolverhampton	do.
Road Works, &c., Spital, Rubislow, &c.	Heath Town (Staffs) U.D.C.	Walker & Duncan, Civil Engineers, 3, Golden-square, Aberdeen	do.
Street Works	Aberdeen Land Association, Ltd.	Surveyor, Chester Bank, Prestwich	do.
Electricity Buildings, Dorchester-street	Prestwich (Lancs)	F. H. Moger, 3, Wood-street, Bath	June 1
Fifteen Cottages, Nicholas-street, Limerick	Bath Corporation	J. F. Power, Carr-street, Limerick	do.
Laundry at Workhouse	Thomond Artisans Co., Ltd.	Whittaker & Bradbury, Architects, Macclesfield	do.
Twenty Houses, Rhymney	Macclesfield Guardians	T. Roderick, Architect, Merthyr	do.
Rebuilding Chapel, Bargoed, Wales	Buchan Brewery Company	T. Roderick, Architect, Clifton-street, Aberdare	June 2
Schools, Rhymney, Mon.	.....	James & Morgan, Architects, Cardiff	do.
*Sewerage and Sewage Disposal Works, Formby	Bedwellty School Board	C. A. Atkinson, Engineer, 11, Tithebarn-street, Liverpool	do.
*River Wall, adjoining Baths, Wandsworth	West Lancashire R.D.C.	Council's Surveyor, 41, High-street, Wandsworth, S.W.	June 3
Superstructure of Pavilion, &c.	Wandsworth Borough Council	Town Clerk, Albion House, Ramsgate	do.
*Repointing Brickwork, at Park Hospital, Hither Green Mortuary, &c.	Ramsgate Corporation	Office of the Board, Embankment, E.C.	do.
Widening Bridge over River Derwent, Matlock	Metropolitan Asylums Board	C. Lynam, Architect, Stoke	June 4
Water Supply Works, &c., Bridgend, Glam.	Stoke-upon-Trent Guardians	J. S. Storey, County Surveyor, Derby	June 5
*Making-up Roads	Derbyshire County Council	J., & T. J. Hurley, Architect, 10, Bridgend-road, Aberkenfig	June 8
*Paving and Making-up New Street	Penybont R.D.C.	Council's Surveyor, Beckenham, S.E.	do.
*Sewerage and Sewage Disposal Works	Beckenham U.D.C.	Council's Engineer, Town Hall, Camberwell, S.E.	do.
*Repair of Tar and Asphalt Paving	Camberwell Borough Council	Council's Engineer, Broadway, Southborough, Tunbridge Wells	June 9
*Workmen's Dwellings, Mortlake	Tonbridge R.D.C.	Council's Engineer, 712, High-road, Tottenham	do.
*Additions to Infirmary	Tottenham U.D.C.	Council's Surveyor, Council Offices, High-street, Mortlake, S.W.	do.
*New Branch Post Office, Burslem	Barnes, U.D.C.	F. B. Ward, Architect, 7, York-row, Wisbech	do.
*Workshops at New Savings Bank, West Kensington	Holbeach Union	H.M. Office of Works, Storey's Gate, S.W.	do.
*New Sorting Office, Stockwell	Commissioners of H.M. Works, &c.	do.	do.
*Making-up Roads	do.	do.	June 10
*Three Years Contract	do.	Council's Engineer, 712, High-road, Tottenham	do.
*Block of Tenement Dwellings, Edgware-road	Tottenham U.D.C.	H.M. Office of Works, Storey's Gate, Westminster, S.W.	do.
*Four Shops, High-street, Barnes	H.M. Office of Works	Town Hall, Marylebone-lane, W.	June 12
*Widening and Enlargement of Victoria Station	St. Marylebone Borough Council	F. & W. Stocker, 90 and 91, Queen-street, Cheapside, E.C.	do.
Bridges, &c., Berwyn, near Llangollen	Metropolitan Asylums Board	The Engineer, London Bridge Station, S.E.	June 24
*University College, Sheffield	L. B. & S. C. Railway Co.	E. Foulkes-Jones, Llangollen	No date.
*Reparations to Spire & Tower of Church nr. Chichester	.....	Gibbs & Flockton, Architects, 15, St. James's-row, Sheffield	do.
Two Houses, Bandon, Ireland	.....	Colson, Farrow, & Nisbett, 45, Jewry-street, Winchester	do.
Shops, Houses, Walkley, near Sheffield	.....	M. A. Hennessey, Architect, 74, South Mall, Cork	do.
Steel Foundry, West Drayton, Middlesex	.....	W. J. Taylor, Architect, Bank-street, Sheffield	do.
Slag, &c.	.....	Tapp & Jones, Engineers, 1, Princes-street, Gt. George-street, S.W.	do.
Gasholder Tank (66 ft. diameter)	Harrogate Corporation	E. W. Dixon, Civil Engineer, 5, Prospect-crescent, Harrogate	do.
Additions to Club Premises, Crompton, Lancs.	Carlow Gas Co.	R. B. Anderson, Civil Engineer, 35A, Gt. George-street, S.W.	do.
Engine House, Oregill, Egremont, Cumberland	Conservatives	C. T. Taylor, Architect, 10, Clegg-street, Oldham	do.
Business Premises, Silloth	Wyndham Mining Co., Ltd.	Secretary, High Mill, Egremont	do.
Church, Hall, &c., Otl Yorks	Mr. J. J. Martin	G. Armstrong, Architect, 24, Bank-street, Carlisle	do.
	.....	Danby & Simpson, Architects, 10, Park-row, Leeds	do.

[See also next page.

PUBLIC APPOINTMENTS.

Nature of Appointment.	By whom Advertised.	Salary.	Application to be in
*Surveyor	Mirfield U.D.C.	150*l.*	May 26
*Clerk of Works	Tamworth Union	Not stated	do.
*Clerks of Works (2)	Tottenham, &c., Jnt. Drainage Com.	4*l.* 4*s.* per week	June 1
*Inspector of Nuisances	The Maldens & Coombe U.D.C.	150*l.*	June 6
*Quantity Surveyor's Assistant	London County Council	2*l.* 2*s.* per week	June 8
*Quantity Surveyor's Assistant	do.	4*l.* 4*s.*	do.
*Draughtsman	Capetown Corporation	260*l.*, &c.	No date.

Those marked with an asterisk (*) are advertised in this Number. *Competitions*, iv. *Contracts*, iv. vi. viii. & x. *Public Appointments*, xix.

PRICES CURRENT (*Continued*).

LEAD, &c.

	Per ton, in London. £	s.	d.	£	s.	d.
LEAD—Sheet, English, 3 lbs. & up.	14	10	0	-	-	-
Pipe in coils	15	0	0	-	-	-
Soil pipe	17	10	0	-	-	-
Compo Pipe	17	10	0	-	-	-
ZINC—Sheet—						
Vieille Montagne ton	28	5	0	-	-	-
Silesian	28	0	0	-	-	-
COPPER—						
Strong Sheet per lb.	0	0	10½	-	-	-
Thin ,,	0	0	11½	-	-	-
Copper nails ,,	0	0	11	-	-	-
BRASS—						
Strong Sheet ,,	0	0	10	-	-	-
Thin ,, ,,	0	0	11	-	-	-
TIN—English Ingots ,,	0	1	5	-	-	-
SOLDER—Plumbers' ,,	0	0	6½	-	-	-
Tinmen's ,,	0	0	8½	-	-	-
Blowpipe ,,	0	0	9½	-	-	-

ENGLISH SHEET GLASS IN CRATES.

15 oz. thirds	2½d. per ft. delivered.
,, fourths	1¾d. ,, ,,
21 oz. thirds	3¼d. ,, ,,
,, fourths	2½d. ,, ,,
26 oz. thirds	4d. ,, ,,
,, fourths	3¼d. ,, ,,
32 oz. thirds	5d. ,, ,,
,, fourths	4¼d. ,, ,,
Fluted sheet, 15 oz.	3d. ,, ,,
,, 21 oz.	4d. ,, ,,
½ Hartley's Rolled Plate	1¾d. ,, ,,
⅓ ,, ,, ,,	2d. ,, ,,
¼ ,, ,, ,,	2¼d. ,, ,,

OILS, &c.

		£	s.	d.
Raw Linseed Oil in pipes or barrels	per gallon	0	2	3
,, ,, ,, in drums	,,	0	2	7
Boiled ,, ,, in pipes or barrels	,,	0	2	5
,, ,, ,, in drums	,,	0	2	9
Turpentine, in barrels	,,	0	3	8
,, in drums	,,	0	3	10
Genuine Ground English White Lead	per ton	21	10	0
Red Lead, Dry	,,	20	0	0
Best Linseed Oil Putty	per cwt.	0	8	0
Stockholm Tar	per barrel	1	12	0

VARNISHES, &c.

	Per gallon. £	s.	d.
Fine Pale Oak Varnish	0	8	0
Pale Copal Oak	0	10	6
Superfine Pale Elastic Oak	0	12	6
Fine Extra Hard Church Oak	0	10	0
Superfine Hard-drying Oak, for Seats of Churches	0	14	0
Fine Elastic Carriage	0	12	6
Superfine Pale Elastic Carriage	0	16	0
Fine Pale Maple	0	16	0
Finest Pale Durable Copal	0	18	0
Extra Pale French Oil	1	1	0
Eggshell Flatting Varnish	0	18	0
White Copal Enamel	1	4	0
Extra Pale Paper	0	12	0
Best Japan Gold Size	0	10	6
Best Black Japan	0	16	0
Oak and Mahogany Stain	0	9	0
Brunswick Black	0	8	6
Berlin Black	0	16	0
Knotting	0	10	0
French and Brush Polish	0	10	0

TO CORRESPONDENTS.

A. H. (Amounts should have been stated.)

NOTE.—The responsibility of signed articles, letters, and papers read at meetings rests, of course, with the authors.

We cannot undertake to return rejected communications.

Letters or communications (beyond mere news items) which have been duplicated for other journals are NOT DESIRED.

All communications must be authenticated by the name and address of the sender, whether for publication or not. No notice can be taken of anonymous communications.

We are compelled to decline pointing out books and giving addresses.

Any commission to a contributor to write an article is given subject to the approval of the article, when written, by the Editor, who retains the right to reject it if unsatisfactory. The receipt by the author of a proof of an article in type does not necessarily imply its acceptance.

All communications regarding literary and artistic matters should be addressed to THE EDITOR; those relating to advertisements and other exclusively business matters should be addressed to THE PUBLISHER, and *not* to the Editor.

TENDERS.

[Communications for insertion under this heading should be addressed to "The Editor," and must reach us *not later than 10 a.m. on Thursdays*. N.B.—We cannot publish Tenders unless authenticated either by the architect or the building-owner; and we cannot publish announcements of Tenders accepted unless the amount of the Tenders given, nor any list in which the lowest Tender is under 100*l.*, unless in some exceptional cases and for special reasons.]

* Denotes *accepted*. † Denotes *provisionally accepted*.

ABERCANALD (Wales).—For the erection of a house, for Mr. David Davies. Mr. R. C. Jenkins, architect, Cefn-Coed:—

E. Williams, Dowlais* £270 | W. Evans £270

AYLESBURY.—For additions to Literary Institute. Mr. Fred. Taylor, architect, Aylesbury:—

Hunt & Son	£1,373 0 0	Webster & Cannon	£1,280 0 0
G. Darlington	1,327 0 0	Moyne & Son	1,260 0 0
Townsend & Co.	1,304 17 10	J. Hodges	1,232 0 0
H. Fincher	1,290 0 0	G. & T. Cannon	1,197 0 0

BECKENHAM.—For erecting "Inglehurst," Beckenham, Kent. Messrs. George Baines & R. Palmer Baines, architects, 5, Clement's Inn, Strand, London, W.C.:—

H. Copeland & Son, Beckenham* £1,726 10 6

BRISTOL.—For the erection of new warehouse and offices in Castle Green, for Messrs. Habgood Bros., metal merchants. Mr. Thos. Scammell, architect, 1, St. Stephen-street, Bristol:—

W. Church	£2,219	Perkins & Son	£2,122
J. James	2,200	F. Chown	2,000
Eastabrook & Sons	2,190	G. Hanphries	1,980
Jones & Hill	2,152	Wilkins & Gosling*	1,880

[All of Bristol.]

CARDIFF.—For additions to Ely Schools, for the School Board. Mr. E. Seward, architect, Queen's Chambers, Cardiff:—

C. C. Dunn, Cowbridge-road, Cardiff* £2,126 2 6

LONDON.—For pulling down and re-erecting Nos. 368 and 370, Oxford-street, and a portion of Gees-court, for Mr. Chas. Morrell. Mr. J. C. Radford, architect, 163, Upper Richmond-road, S.W. Quantities by Messrs. Rood & Robinson:—

W. R. Williams	£6,287	Carmichael	£5,685
Parsons & Co.	6,040	Smith & Sons	5,620
Parkinson & Son	5,995	Lorden & Son	5,544
Stimpson & Co.	5,940	Patman & Fotheringham	5,543
H. Roffey	5,938	F. G. Minter*	5,540
Martin, Wells, & Co.	5,800		
Holliday & Greenwood	5,732		

LONDON.—For rebuilding 91, Great Titchfield-street, W., for Mr. H. J. Bale. Mr. William Pywell, architect, Cumberland House, Hanwell. Quantities by Mr. Max. Clarke:—

Lown & Sons	£3,773	Kingerlee & Sons	£3,227
Lawrance & Sons	3,486	W. Whitehead	3,065
J. Carmichael	3,400	B. E. Nightingale	3,025
W. G. Minter	3,357	Walter Wallis*	2,999

LONDON.—Electric light and electric bell installations, Vauxhall sub-fire station and Streatham fire station:—

Vauxhall Sub-station.

National Electric Wiring Co., Ltd.	£273 10 0	Alliance Electrical Co., Ltd.	£240 12 0
Tyler & Duncan	260 0 0	Jackson Bros.	236 7 6
W. Johnson	255 13 0	Oliver, Clark, & Co.	234 0 0
Glover & Co., Ltd.	243 10 0	Sunderland & Co.	229 0 0
Drake & Gorham, Ltd.	241 0 0	Coleby & Co.	227 10 0
		A. H. Marshall*	197 10 0

Streatham Station.

National Electric Wiring Co., Ltd.	£344 0 0	Sunderland & Co.	£289 0 0
Tyler & Duncan	330 0 0	Alliance Electrical Co., Ltd.	285 0 0
Oliver, Clark, & Co.	300 0 0	Glover & Co., Ltd.	279 0 0
W. Johnson	299 17 0	Coleby & Co.	275 0 0
Drake & Gorham, Ltd.	292 0 0	Jackson Bros.	273 2 6
		A. H. Marshall*	239 10 0

LUTON.—For the erection of new north aisle and enlarging the organ chamber and choir vestry of Christ Church, Luton. Messrs. J. R. Brown & Son, architects, Luton. Quantities by Messrs. J. B. Colwill & Son, 6, Alma-road, St. Albans:—

	£	s.	d.	Allowance for Old Materials. £	s.
French	2,310	0	0	10	0
Nevelle	2,066	2	0	20	0
Attwood	2,050	10	0	30	0
Angel	2,023	10	9	—	
Pryer	1,968	0	0	38	0
Miskin & Sons	1,958	0	0	8	0
Mallet & Wood	1,924	10	0	20	0
Dunham*	1,784	0	0	7	10

MERTON PARK (Surrey).—For the erection of seven pairs of semi-detached houses in Wilton-crescent, Wimbledon, for Merton Park Estate Co., Ltd. Mr. H. G. Quartermain, architect, Merton Park, Surrey. Quantities by Mr. W. W. Dearle, of Broad-street House, New Broad-street, E.C.:—

Johnson & Co., Ltd.	£14,490	Garrett & Son	£12,978
Bulled & Co.	14,307	Lorden & Son	12,222
Stewart & Son	14,200	Burges & Sons, Wycliffe-road, Wimbledon*	11,200
Smith & Son, Ltd.	13,397		
Holliday & Greenwood, Ltd.	13,250		

MIDDLEWICH.—For the erection of banking premises, for the Birmingham District and Counties Banking Co, Ltd. Mr. Ernest E. Shepherd, architect, Bond Gate, Nuneaton. Quantities by Messrs. G. Connell & Son, Grainger-street, Newcastle-on-Tyne:—

S. Manley	£2,598 0 0	Smith & Son	£2,297 15 8
Micklewright & Sons	2,519 0 0	Birchall Bros.*	2,070 0 0

NORTHWICH.—For additions to public baths, for the Urban District Council. Mr. John Brooke, Surveyor to the Council, Northwich:—

Extension.

Samuel Appleton, Northwich* £484

Repairs.

Samuel Appleton, Northwich* £160

SHOEBURYNESS.—For the erection of school buildings, Richmond-avenue, for the School Board. Messrs. Burles & Harris, architects, Clarence Chambers, Southend:—

G. Ventris	£4,630 0	Davis & Leaney	£3,649 0
J. Dowsett	3,998 15	A. R. Whur	3,590 0
Dowsing & Davis	3,930 0	J. Alp	3,496 0
A. J. Golding	3,875 0	E. West	3,479 0
Whur & Campkin	3,850 0	W. E. Davey	3,244 0
Dupont & Co.	3,785 0	Harris & Rowe, Ltd., Shoeburyness*	3,198 0
Davey, Ltd.	3,779 0		
S. E. Moss	3,655 10		

LONDON SCHOOL BOARD TENDERS.

At the last meeting of the London School Board the Works Committee submitted the following lists of tenders. Mr. T. J. Bailey is the Board's Architect:—

The exteriors of the following schools will be painted between May 16 and June 13, 1903:—

ADYS-ROAD:—

H. Line	£295 0	W. Hooper	187 0
Sayer & Son	217 0	J. & C. Bowyer	186 0
J. F. Ford	198 0	W. V. Goad	175 0
Mitchell & Son	188 0	Garrett & Son*	164 0
Maxwell Bros., Ltd.	187 15		

BARING-ROAD:—

W. Banks	£97 18 6	W. J. Howie	£67 0 0
Hayter & Son	83 0 0	H. Groves*	66 0 0
G. Kemp	80 0 0		

BELL-STREET:—

Viney & Stone	£555 0	Balfour & Co.	£193 10
C. F. Kearley	305 0	Densham & Sons	172 0
S. Polden	286 0	T. Cruwys	167 15
G. H. Sealy	275 0	Chinchen & Co.*	130 0

BLACKSTOCK-ROAD:—

T. Willson	£207 0	Stevens Bros.	£168 0
G. Kirby	188 0	Grover & Sons	159 0
C. & W. Hunnings	185 0	H. Runham Brown	158 0
McCormick & Sons	177 0	Bate Bros.*	156 15

[*See also next page.*

CAMPBELL-STREET:—

Viney & Stone	£652	F. Chidley	£199
T. Cruwys	220	Brown & Sons	193
Densham & Sons	215	W. Chappell*	185

CANONBURY-ROAD:—

Dearing & Son	£140 0	G. Wales	£128 5
W. Martin	138 0	F. W. Harris	124 15
McCormick & Sons	135 0	Marchant & Hirst	118 0
Williams & Son	133 0	C. & W. Hunnings*	111 0

CHOUMERT-ROAD:—

Sayer & Son	£250 10	W. Hooper	£128 0
H. Line	199 0	G. Kemp	127 0
Mitchell & Son	156 0	Maxwell Bros., Ltd.	124 0
W. V. Goad	145 0	Garrett & Son*	108 0

CRANBROOK-ROAD:—

Silk & Son	£310 0	Woollaston & Co.	£212 0
A. Porter	285 0	Belcher & Co., Ltd.	182 10
F. Bull	232 10	Haydon & Sons	171 0
Barrett & Power	213 0	G. Barker*	165 0
G. Wales	212 0		

EARDLEY-ROAD:—

R. A. Jewell	£237 0 0	J. & C. Bowyer	£158 0 0
Bulled & Co.	235 7 6	Leney & Co.	158 0 0
Johnson & Co., Ltd.	165 0 0	E. B. Tucker*	102 0 0

FAIRFIELD-ROAD:—

Dolman & Co.	£168 0	A. E. Symes	£144 0
A. W. Derby	152 0	J. F. Holliday	118 10
Corfield & Co.	149 0	A. J. Sheffield	114 0
F. Bull	144 0	G. Barker*	104 10

GRAVEL-LANE (including enlargements opened in 1899):—

Parrott & Ison	£247 0	W. Hornett	£134 0
Martin, Wells, & Co., Ltd.	145 0	Johnson & Co.	110 0
J. Greenwood, Ltd.	143 0	Staines & Son	109 0
Macey & Sons, Ld.	143 0	Gavin Bros.	103 10
		Belcher & Co., Ld.*	86 15

HUGON-ROAD:—

J. & M. Patrick	£238	Curd & Sons	£145
Hudson Bros.	207	E. Flood	145
General Builders, Ltd.	189	W. Hammond*	119
R. S. Ronald	185		

KEETON'S-ROAD:—

Hayter & Son	£380 0	Greenwood, Ltd.	£239 0
J. & M. Patrick	305 0	E. Triggs	234 0
H. J. Williams	283 5	Lathey Bros.*	217 0
Sayer & Son	265 0	Proctor & Son	203 0
Johnson & Co.	242 0		

"MOBERLEY" (boys, girls, and infants):—

Balfour & Co.	£228 15	Chinchen & Co.	£119 10
T. Cruwys	170 0	W. Chappell	118 10
F. Chidley	165 0	Brown & Sons	118 0
W. R. & A. Hide	141 10	Bristow & Eatwell*	97 7

MULGRAVE-PLACE (old portion):—

W. J. Howie	£179 0 0	W. Banks	£135 17 6
Martin, Wells, & Co., Ltd.	150 0 0	Hayter & Son	135 0 0
H. Groves	149 0 0	Proctor & Son*	115 0 0

NEWINGTON GREEN (All buildings):—

Silk & Son	£335 0	J. Stewart	£266 0
Barrett & Power	310 0	H. Runham Brown	250 10
T. Willson	304 0	Marchant & Hirst	234 0
A. Porter	297 0	Dearing & Son*	232 0
W. Martin	285 0		

POOLE'S PARK:—

J. Stewart	£168	Stevens Bros.*	£134
Grover & Son	164	Bate Bros.	130
Wall & Co.	154	C. & W. Hunnings	130
G. Kirby	148		

REGENT-STREET:—

Hayter & Son	£335 0	T. D. Leng	£250 0
W. J. Howie	293 0	H. Groves	234 0
J. C. Chalkley	268 0	G. Kemp*	203 0
S. E. Musgrove	267 2	Proctor & Son	194 0

SCARSDALE-ROAD:—

J. R. Sims	£277 0	Garrett & Son	£204 0
Sayer & Son	253 0	W. Hooper	190 0
J. C. Chalkley	249 0	E. Triggs	187 0
Lathey Bros.	209 0	H. J. Williams*	182 18

SUSSEX-ROAD:—

Leney & Son	£198 0	Rice & Son	£147 0
W. Read	185 0	Smith & Son	143 0
General Builders, Ltd.	179 0	E. Triggs	130 0
W. Downs	177 0	Maxwell Bros., Ltd.*	127 15

THOMAS-STREET:—

Vigor & Co.	£314 0 0	Gibb & Co.	£284 0 0
J. F. Holliday	306 4 0	Dolman & Co.	258 0 0
A. J. Sheffield	300 0 0	A. W. Derby	234 0 0
Haydon & Sons	293 2 6	Corfield & Co.	225 0 0

WATERLOO-ROAD:—

T. L. Green	£314 0	J. R. Sims	£154 0
King & Son	197 0	Holloway Bros., Ltd.	150 0
W. Downs	186 0	Rice & Son*	126 0
H. J. Williams	157 17		

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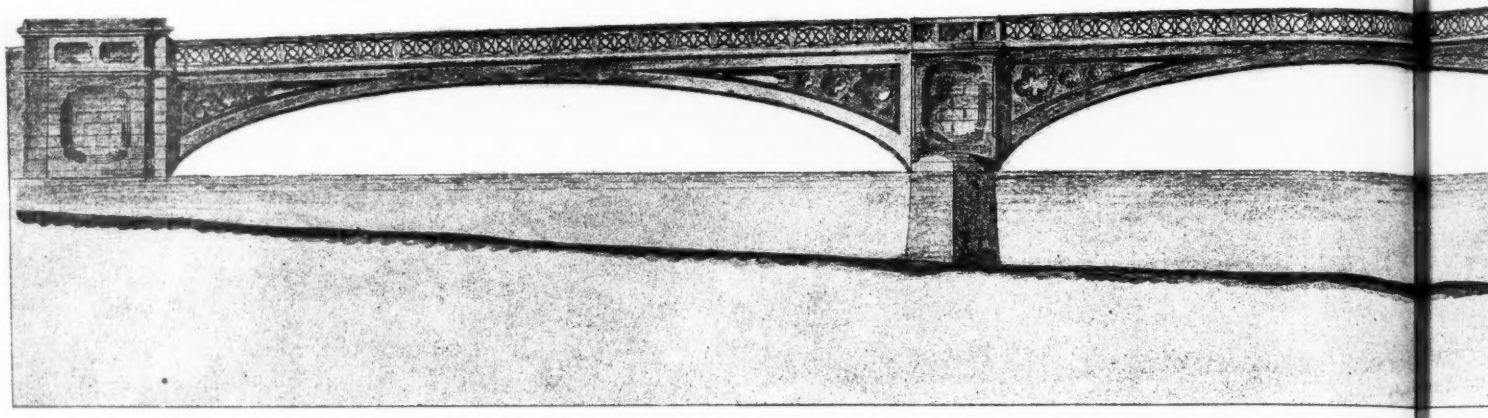

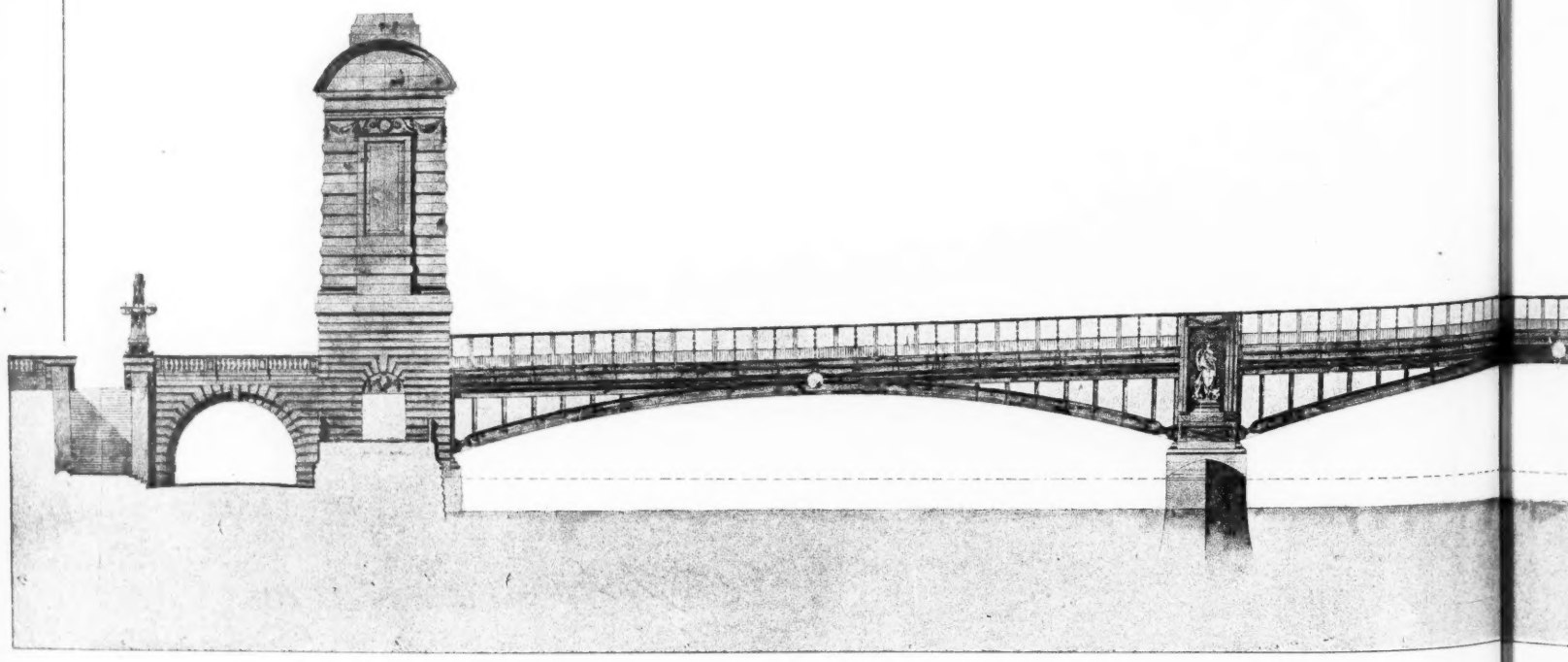

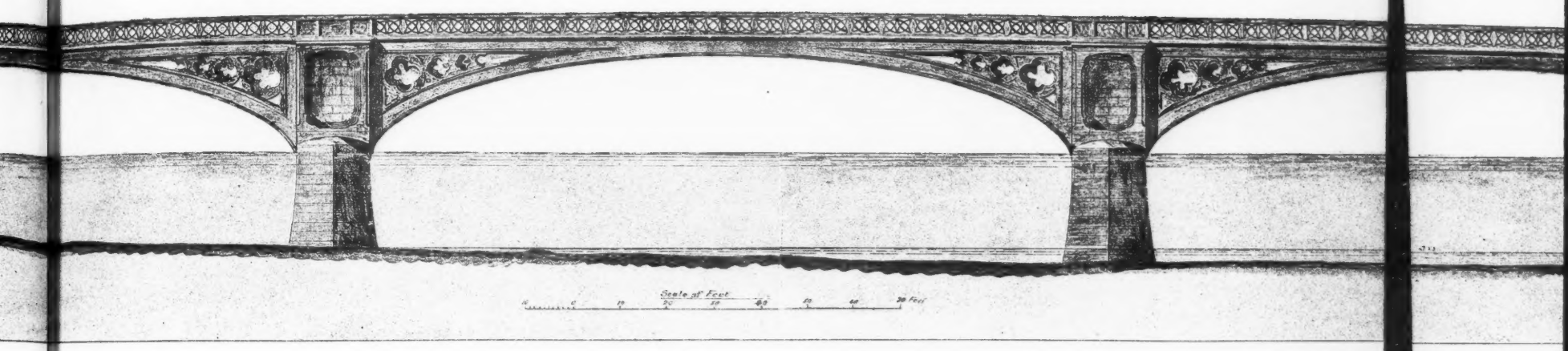

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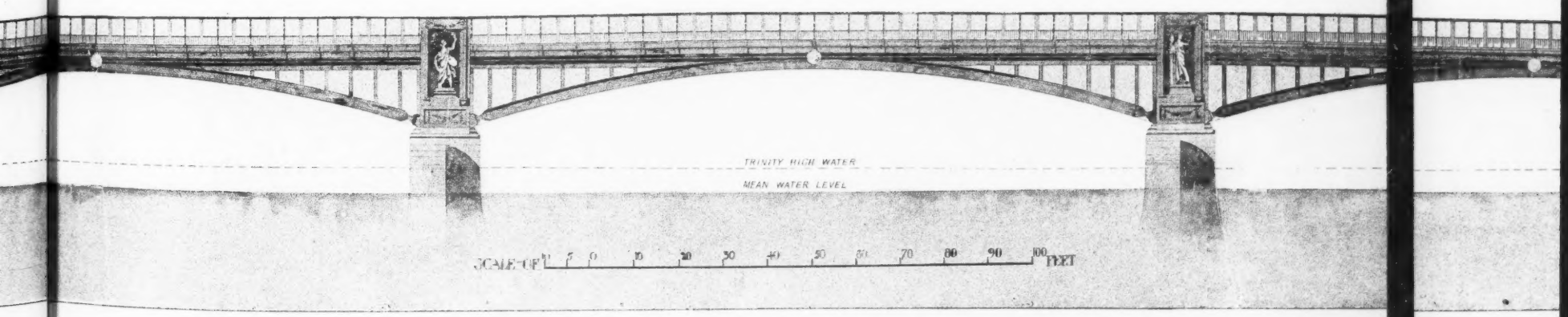

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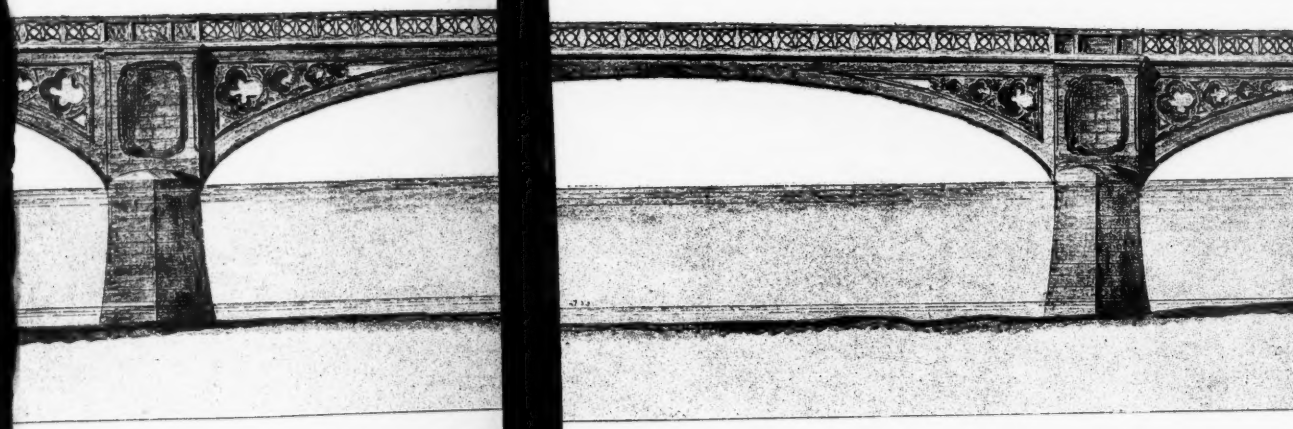

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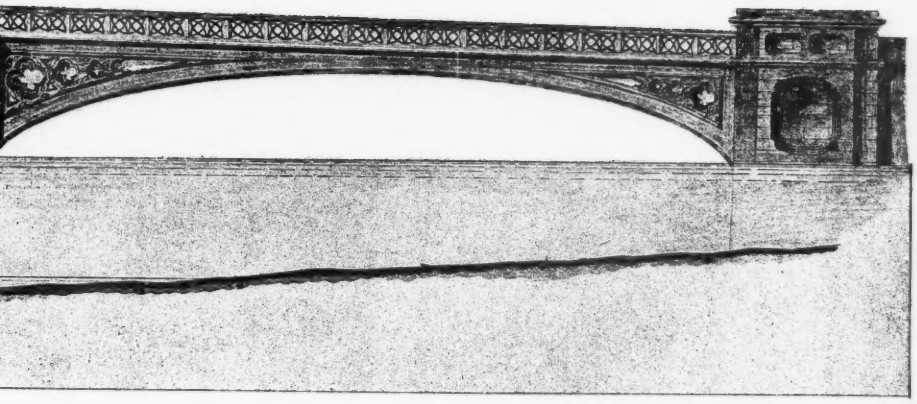

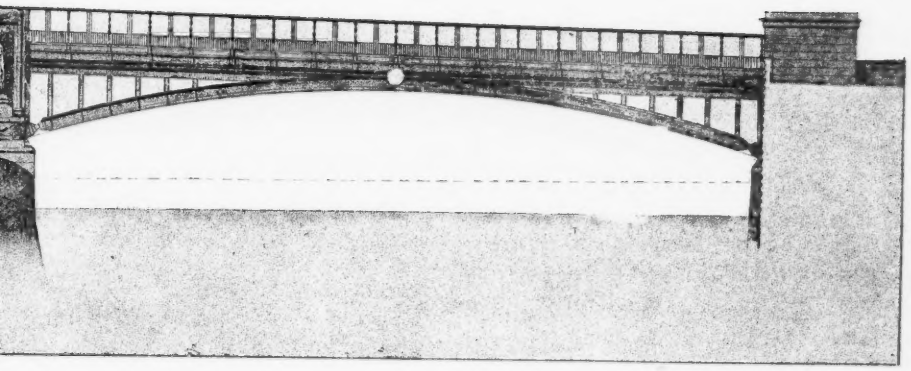

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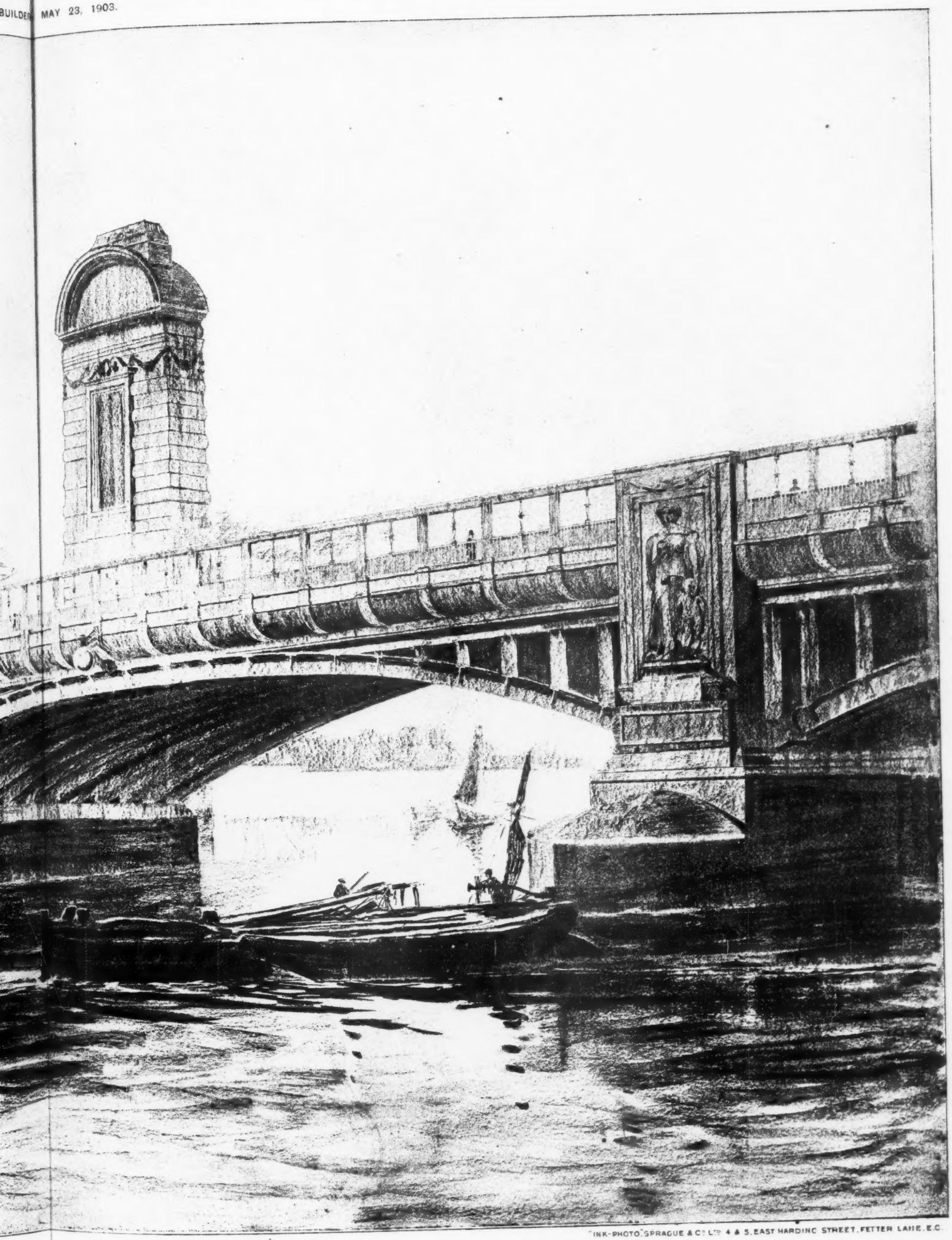

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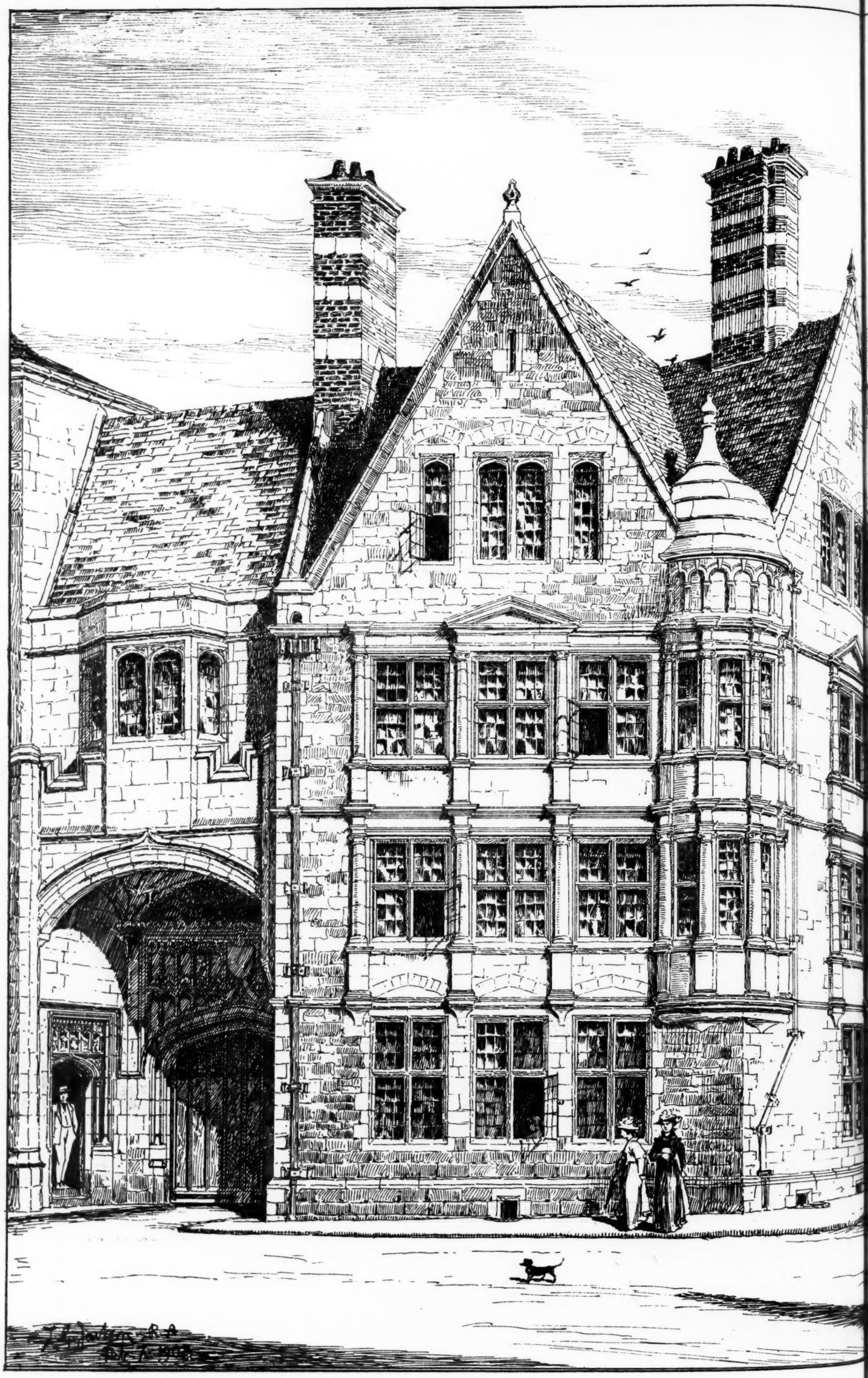

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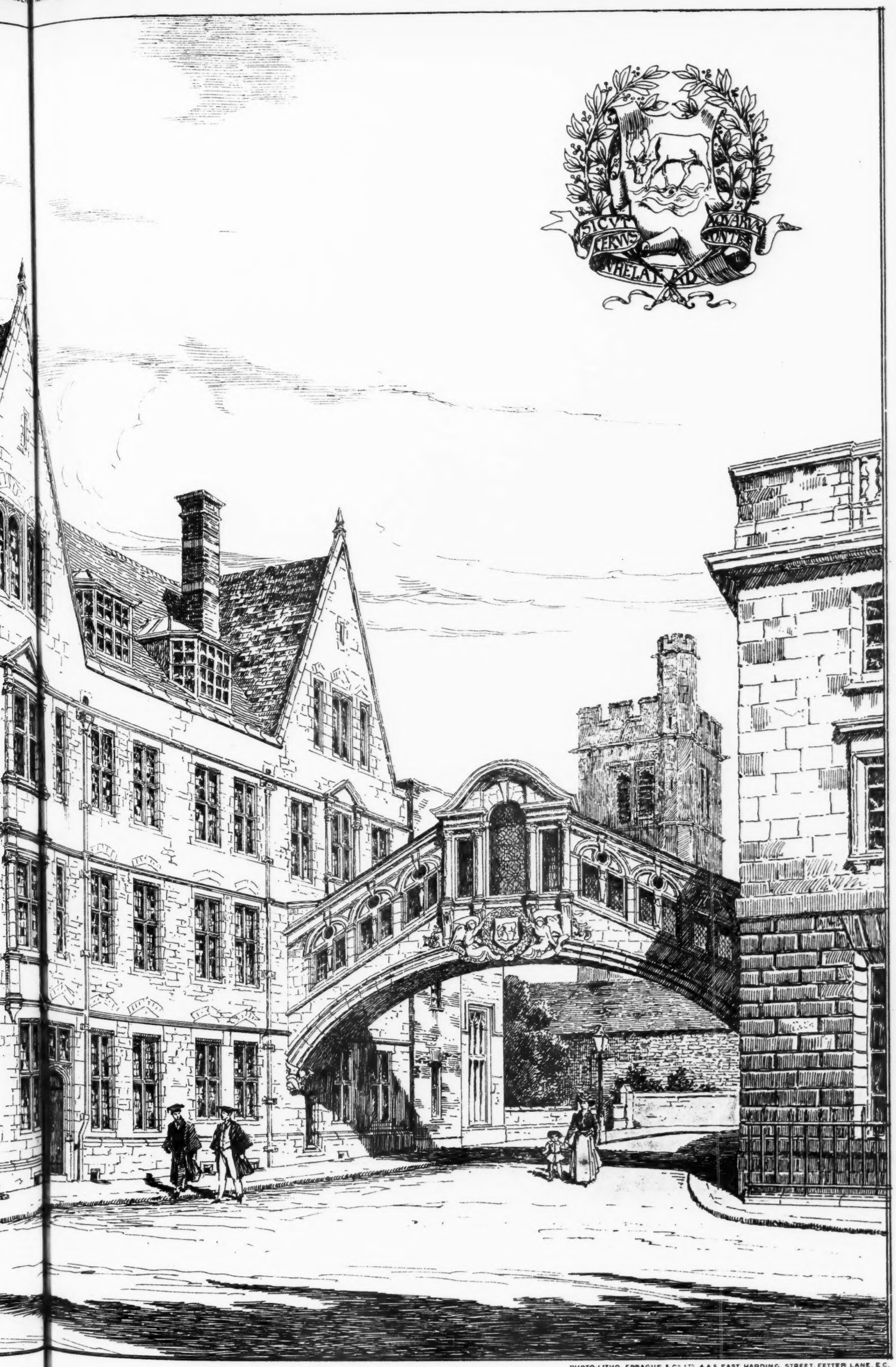

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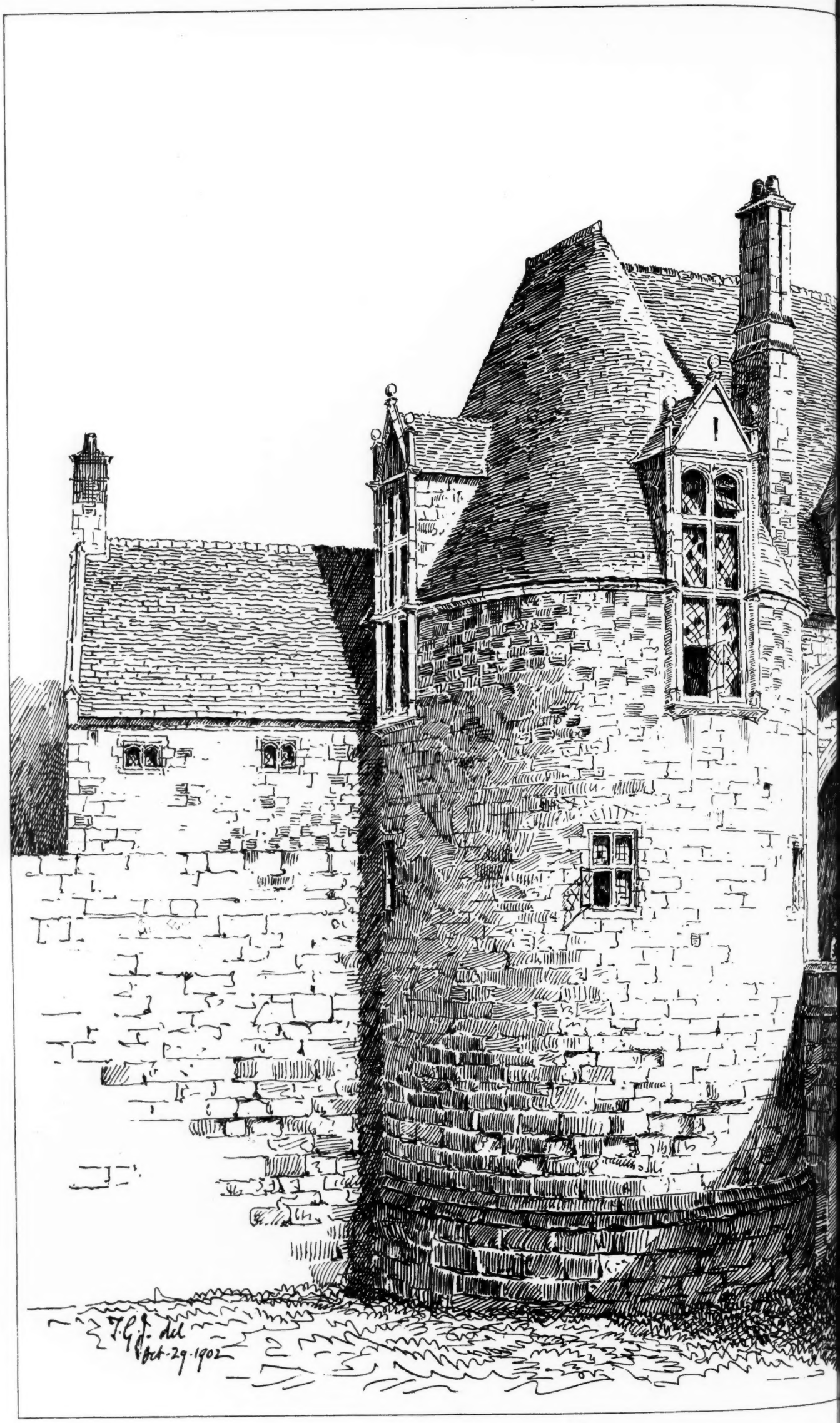
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Oct. 29. 1902

Nottingham Castle

Proposed adaptation of the Gateway to purposes of the Museum.

T. G. Jackson. R.A.
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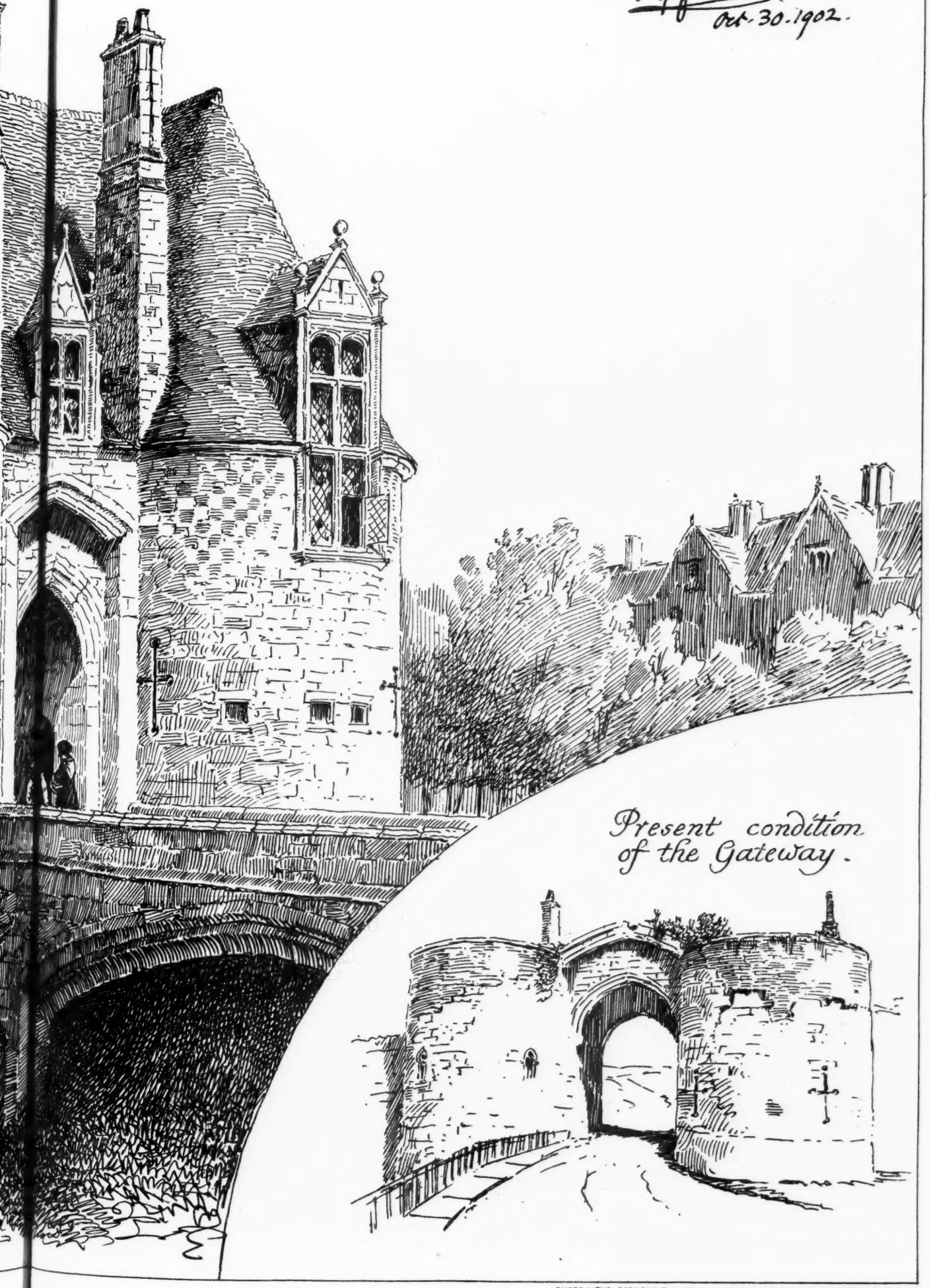

Present condition of the Gateway.

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